Australian VANADIUM LIMITED

**ASX ANNOUNCEMENT** **31 JULY 2024**

# QUARTERLY ACTIVITIES REPORT

*Period ending 30 June 2024*

## HIGHLIGHTS

### Australian Vanadium Project

- The first phase of the Optimised Feasibility Study (OFS) for the Australian Vanadium Project (Project) was completed. The aim of the OFS is to maximise project value of the combined orebody post AVL's merger with Technology Metals Australia Limited (TMT). Work in phase one included:
  - Assessing the southern end of the orebody to be the most economic section of the orebody to commence mining.
  - Determining Tenindewa, near Geraldton, to be the preferred location for the downstream processing plant.
  - Completing an updated Mineral Resource Estimate (MRE) for the combined Project which showed a 39% increase in the Measured and Indicated categories of the high grade domain, with a global vanadium MRE of 395.4Mt at 0.77% $V_2O_5$ containing a high grade domain of 173.2Mt at 1.09% $V_2O_5$, including 105.4Mt at 1.12% $V_2O_5$ classified as Measured or Indicated.
- The second phase of the OFS, now underway, focuses on finalising the detailed mining plan using the results of the updated MRE, optimising all project infrastructure and completing the layout and key design criteria for the upstream CMB plant at Gabanintha and downstream processing plant at Tenindewa.
- The Company continues to focus on approvals, financing and offtake for the Project.

### Vanadium in energy storage

- Through its wholly owned subsidiary, VSUN Energy, AVL has continued to develop strategies to generate shareholder value. These strategies focus on leveraging the significant demand for long duration energy storage, which provides support to electricity grids increasingly powered by variable renewable energy such as solar and wind.
- The Company is advancing several partnering opportunities with energy offtakers, technology providers and financial partners for the deployment of vanadium flow battery (VFB) energy storage solutions through VSUN Energy.
- Samples of AVL's vanadium electrolyte manufactured at the Company's electrolyte facility in Perth have been sent to VFB manufacturers and associated parties to qualify for use in VFBs.
- The appointment of Steve Banning as Principal Advisor and Dr Yifeng Li as Product Development Manager has added considerable commercial and technical expertise to the VSUN Energy team, with the aim of accelerating the commercialisation of VFB opportunities in Australia.

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**Corporate**

- No lost time injuries or reportable environmental incidents were recorded during the quarter.
- A $14.7 million progress payment was received from an Australian Government grant under the Modern Manufacturing Initiative – Manufacturing Collaboration Stream (Grant). The Grant provides up to $49 million to support the Project, facilitating new critical mineral production to strengthen the domestic vanadium supply chain in the battery market. AVL has now received $24.5 million in progress payments under the Grant.
- **Cash position of $36.4 million as at 30 June 2024**, including restricted cash of $0.4 million and the funding from the Grant.

CEO, Graham Arvidson comments, *"AVL is making significant progress in advancing initiatives to deliver value across the vanadium supply chain. By focusing on the most promising sections of the orebody and conducting a comprehensive analysis to determine the optimal location for the downstream processing plant, we have established the key foundations for the remaining OFS activities. This will enable us to fully define a 'stronger for longer' Project.*

*"The team is now executing the remaining OFS scope to maximise project value and bankability, while minimising project execution risk. Concurrently, AVL continues to pursue opportunities to utilise funding from the Grant for activities such as detailed engineering and expediting the project schedule by procuring long lead equipment.*

*"As we continue to advance the Project, we are seeing significant revenue opportunities driven by the global demand for long duration energy storage. VFBs provide a proven technology with competitive capital costs and substantial operational benefits, addressing the growing demand for long duration energy storage.*

*"Through our wholly owned subsidiary, VSUN Energy, we are progressing several partnership opportunities to commercialise our 'pit-to-battery' value chain capability and deliver highly competitive VFB energy storage solutions. Importantly, we continue to add to our excellent team, ensuring we have both the commercial and technical expertise in-house as we build our capability to offer commercially available, turnkey, utility scale VFBs.*

*"There is a tremendous opportunity for AVL to provide competitive long duration energy storage solutions in Australia, utilising Australian mining, processing and manufacturing expertise and creating significant value for our shareholders."*

**Activities for the quarter ended 30 June 2024 for the Company are as follows:**

## AUSTRALIAN VANADIUM PROJECT

The Company continued to progress activities aimed at developing the Project, which includes a mine and a crushing, milling and beneficiation plant (CMB plant or concentrator) located at Gabanintha, near Meekatharra in Western Australia, and a downstream processing plant at Tenindewa, near Geraldton in Western Australia (see Figure 1).

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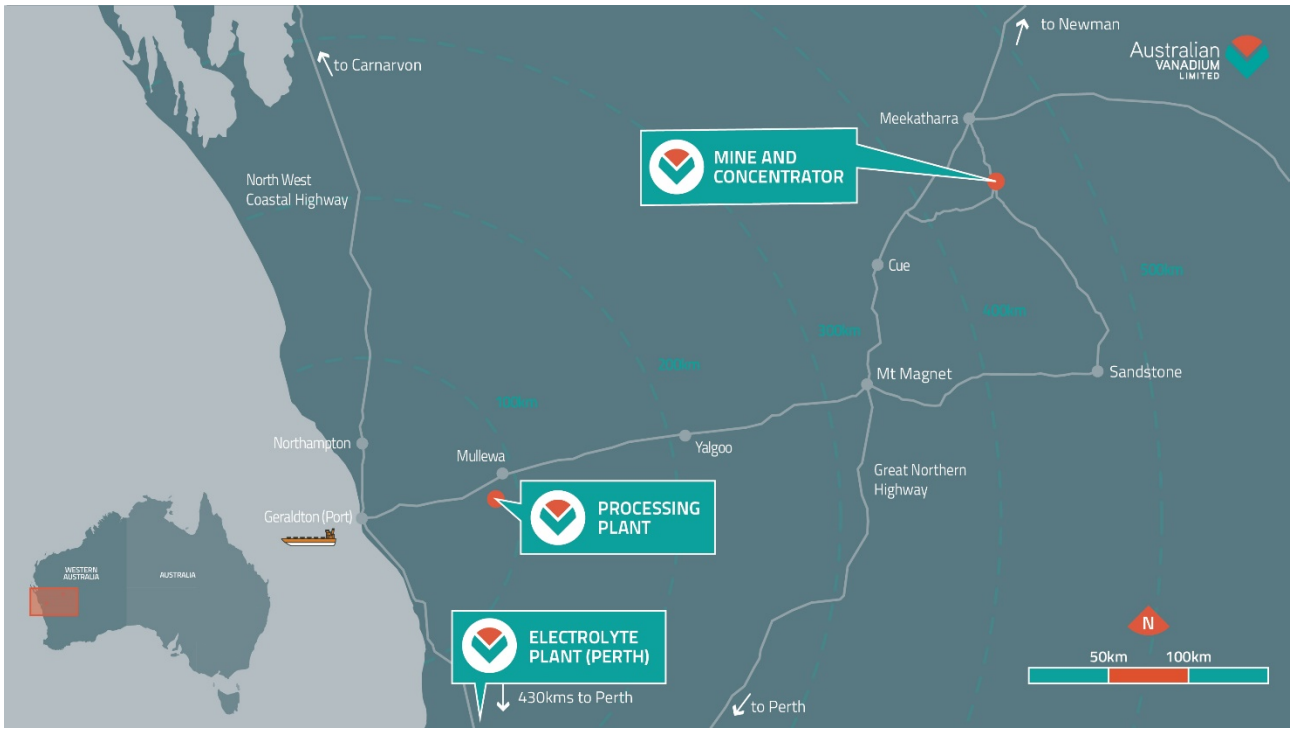


***Figure 1 - AVL Project Locations***

## Completion of first phase of Optimised Feasibility Study

Following AVL's merger with TMT on 1 February 2024,[1] AVL began work on an OFS to integrate the two adjoining projects on a single orebody. The first phase of the OFS was completed during the quarter and delivered the following milestones:

- **Updated MRE** showing a 39% increase in Measured and Indicated categories for the high grade vanadium domain and increased iron grades.[2]
- **Identification of an optimal location along strike to commence mining** with higher vanadium and iron concentrate grades and favourable weathering attributes for economic mining.[3]
- **Identification of optimal processing plant location** at Tenindewa, near Geraldton in Western Australia as the most technically and economically viable location.[4]

### *Updated Mineral Resource Estimate*

As announced on 7 May 2024,[2] the Company released an updated MRE which combined AVL and TMT's previous MREs[5] and incorporated additional reverse circulation drilling, diamond core drilling

[1] See ASX announcement dated 1 February 2024 *'Successful Implementation of AVL and TMT Merger'*
[2] See ASX announcement dated 7 May 2024 *'39% increase in High Grade Measured and Indicated Mineral Resource'*
[3] See ASX announcement dated 11 March 2024 *'Higher Vanadium and Iron Concentrate Grades Highlighted in Testwork'*
[4] See ASX announcement dated 2 July 2024 *'Completion of First Phase of Optimised Feasibility Study'*
[5] See AVL ASX announcement dated 1 November 2021 '*Mineral Resource update for the Australian Vanadium Project*' and TMT ASX announcement dated 7 November 2022 '*MTMP Global Mineral Resource upgrade*'

and down hole density data conducted during 2022. The updated MRE also unified the model domaining and interpretation at the Project, which was a necessary step to progress the OFS.

The updated Measured, Indicated and Inferred MRE contained within a massive magnetite high grade domain (HG domain or HG) and overlying low-grade (LG) disseminated magnetite domains a total of **395.4 million tonnes (Mt) at 0.77% $V_2O_5$**. The updated estimate includes a 107% increase in the Indicated category HG within southern Blocks 50 to 70. Also included is a maiden Measured category mineral resource of **7.8Mt at 1.16% $V_2O_5$** within Blocks 50 to 62 in the HG, significantly improving the category of resources in those blocks to that previously reported in November 2021.[4]

Table 1 includes an updated MRE table for the Project.

| Domains | Category | Mt | $V_2O_5$ % | Fe % | $TiO_2$ % | $SiO_2$ % | $Al_2O_3$ % |
|---|---|---|---|---|---|---|---|
| **HG** | Measured | 30.6 | 1.13 | 46.3 | 12.9 | 7.4 | 6.2 |
| | Indicated | 74.8 | 1.11 | 47.5 | 12.6 | 7.0 | 5.7 |
| | Inferred | 67.9 | 1.06 | 45.3 | 12.1 | 9.0 | 6.6 |
| | **Subtotal** | **173.2** | **1.09** | **46.5** | **12.5** | **7.8** | **6.1** |
| **LG 2-5** | Measured | - | - | - | - | - | - |
| | Indicated | 61.8 | 0.55 | 26.1 | 7.1 | 26.6 | 16.3 |
| | Inferred | 142.5 | 0.48 | 24.9 | 6.6 | 28.9 | 15.2 |
| | **Subtotal** | **204.3** | **0.50** | **25.3** | **6.8** | **28.2** | **15.5** |
| **Trans 6-8** | Measured | - | - | - | - | - | - |
| | Indicated | - | - | - | - | - | - |
| | Inferred | 17.9 | 0.65 | 31.0 | 7.3 | 24.1 | 14.4 |
| | **Subtotal** | **17.9** | **0.65** | **31.0** | **7.3** | **24.1** | **14.4** |
| **Global** | Measured | 30.6 | 1.13 | 46.3 | 12.9 | 7.4 | 6.2 |
| | Indicated | 136.6 | 0.85 | 37.8 | 10.1 | 15.8 | 10.5 |
| | Inferred | 228.2 | 0.66 | 31.4 | 8.3 | 22.6 | 12.6 |
| | **Total** | **395.4** | **0.77** | **34.8** | **9.3** | **19.1** | **11.4** |

***Table 1 – Australian Vanadium Project – May 2024 MRE by Domain***

***Note**: Totals may not add up due to rounding.*

### *Identification of an optimal location along strike to commence mining*

The first phase of the OFS identified the optimal location to commence mining, which has been determined as the southern end of the orebody in Block 50 through Block 80 (see Figure 2), which contains the most economically viable grade for mining. Vanadium concentrates from Blocks 70 and 80 have been shown to average up to 1.6% $V_2O_5$ with iron concentrate grades averaging 60%.[3] This area of the orebody, comprising the southern end of the original AVL leases and TMT's Yarrabubba deposit, also benefits from shallow surface weathering and a low strip ratio, maximising mining efficiencies.

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Consolidation of the Project has allowed AVL greater flexibility in the location of the CMB plant and infrastructure, which is expected to result in improved project layout and opportunities to reduce impacts on the land.

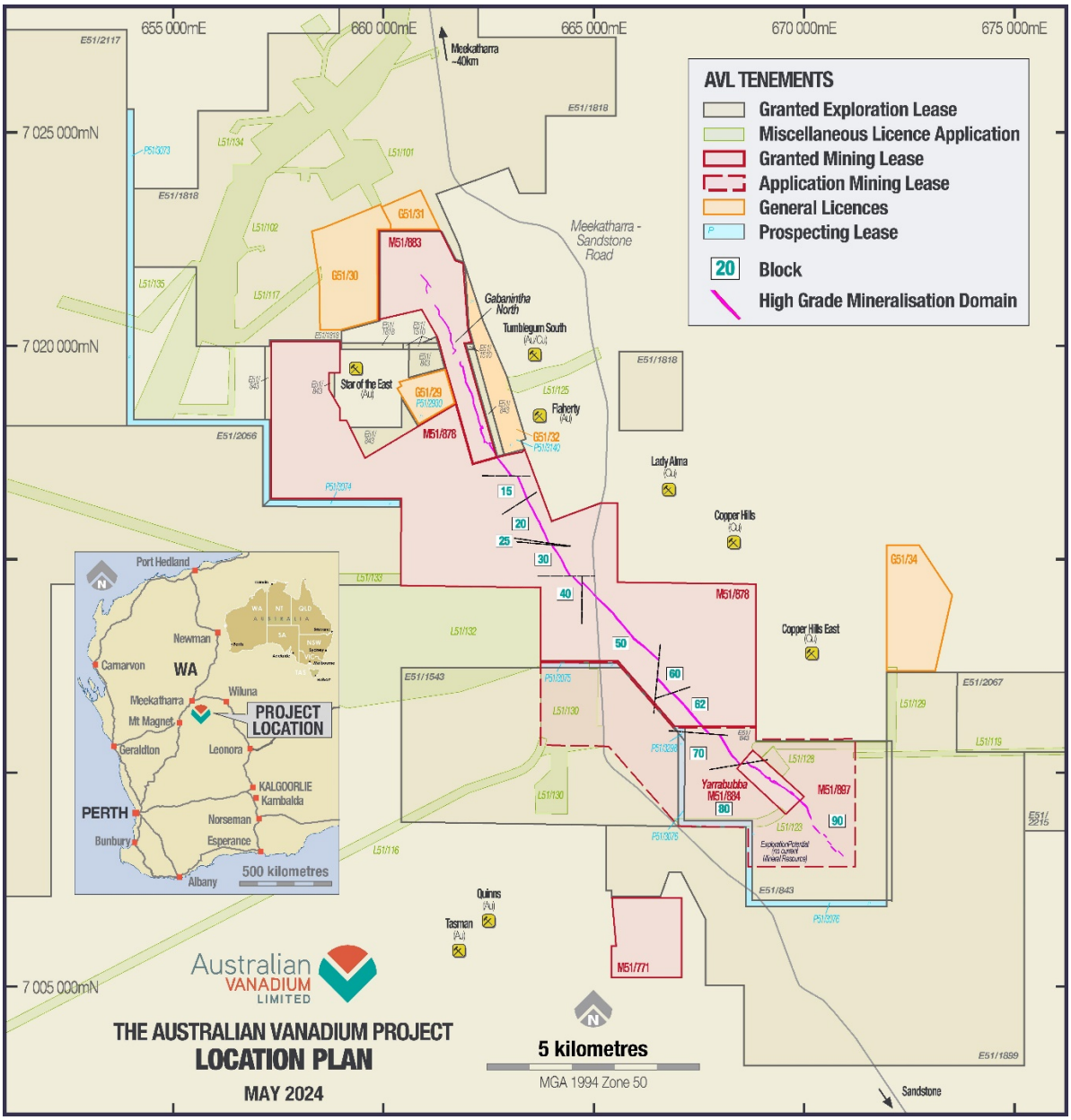


*Figure 2 - Location and Tenure of The Australian Vanadium Project showing fault block numbering*

### *Identification of optimal processing plant location*

During the quarter, AVL concluded a key trade-off study to identify the optimal location for the downstream processing plant. AVL had proposed to construct the downstream processing plant at Tenindewa, near Geraldton in Western Australia, whereas TMT's proposed location was adjacent to the mine site at Gabanintha. Following extensive review, Tenindewa has been determined as the optimal location of the plant for the following reasons:

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- Reduced length of the gas pipeline to the plant (approximately 20km long to Tenindewa in contrast with 180km long to Gabanintha). The difference in length has significant impacts, including reduced:
  - cost of gas delivered;
  - permitting requirements; and
  - risk of delays and cost overruns.
- Multiple existing gas pipelines located near Tenindewa improve certainty of supply and project economics.
- Readily available and permitted[6] low salinity water reducing execution risk.
- Tenindewa is approximately 80km from Geraldton and approximately 18km from Mullewa, offering opportunities for regional employment and a local workforce, and reducing camp accommodation requirements.
- Lower delivery costs for reagents due to location being close to major centres and services along the coast from Geraldton and Perth.

**Extension of Option Agreement for processing plant land**

On 7 September 2023,[7] the Company announced that a new option agreement had been signed with the landowner of the proposed vanadium processing plant at Tenindewa. An option for a further 12 months to 31 August 2025 has now been exercised.

**Next steps for the Optimised Feasibility Study**

AVL continues to progress with the next phase of the OFS for the Project, with upcoming key milestones including:

- Finalising the detailed mining plan using the results of the updated MRE.
- Optimising all project infrastructure, including proposed roads and pit designs.
- Completing the layout and key design criteria for the upstream CMB plant at Gabanintha and downstream processing plant at Tenindewa.

Work on the OFS is progressing alongside the approval processes for both locations, as well as ongoing offtake and financing discussions. The OFS will enable AVL to have an up-to-date technical and economic study available for potential funding partners, including Australian Government agencies.

[6] See ASX announcement dated 31 July 2023 *'Water Licence Approval for Processing Plant at Tenindewa'*
[7] See ASX announcement dated 7 September 2023 *'New Option Agreement Signed for Vanadium Processing Plant Land'*

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**Approvals**

Permitting and approval processes continued through the quarter, including the following:

- The environmental approvals process commenced by TMT for its part of the Gabanintha site continues, with the Environmental Protection Authority (EPA) assessment report for the benefit of the Western Australian Minister for Environment, issued in February 2024, recommending approval and including recommended conditions, including post-approval actions that must be completed before certain activities can be undertaken. The assessment report is progressing through the appeals process, with one appeal lodged. The Office of the Appeals Convenor (OAC) is assessing the merits of the appeal and has sought feedback from AVL and the EPA. AVL has provided its feedback to the OAC. The OAC will complete assessment of the appeal and provide a report to the Minister for consideration.
- The environmental approvals process commenced by AVL for its part of the Gabanintha site has continued following the merger with TMT. AVL has been reviewing and optimising the design of the combined Project through its work on the OFS and in discussions with the Traditional Owners. AVL continues to focus on executing the approval pathway to ensure that all Project changes are reflected in the EPA approval process.
- For the Processing Plant site at Tenindewa, a development application was submitted to the Department of Planning, Lands and Heritage (DPLH) via the State Development Assessment Unit (SDAU) to facilitate approval to develop the facility. In parallel with the development application, a scheme amendment process was initiated with the City of Greater Geraldton to amend the local planning scheme to allow for a rezoning of the land from “Rural” to “General Industry” which is a key step in finalising approvals for Tenindewa.

**Offtake**

AVL continues to pursue multiple avenues for vanadium offtake, including relationships with traditional steel end users and commodity traders, along with potential new offtakers in the energy and defence sectors.

The rapidly growing need for long duration energy storage in Australia, essential to support a renewable energy focused transition to net zero carbon emissions, presents an offtake opportunity for the Project. Current indications are that, at full production, AVL has the potential to produce vanadium electrolyte for up to 1.1 GWh of energy storage per year, approximately 18% of the Australian Energy Market Operator (AEMO) projected 6GWh per year growth for medium/long duration energy storage over the next 20 years. Consequently, AVL has the option for product from the Project to be largely consumed by the electrolyte market, primarily in Australia, through AVL’s subsidiary VSUN Energy, offering an alternative offtake to traditional steel offtake with its price fluctuations.

Work is also being undertaken on offtake of possible ilmenite and iron concentrate coproducts, with significant progress having been made towards forming binding offtake agreements for both coproducts.

**Other significant activities**

In addition to development of the OFS, AVL continued extensive work on a range of activities during the quarter including:

- finalising the integration of the AVL and TMT businesses and realising synergies to improve shareholder value;
- progressing equity and debt funding discussions for the Project, including continued engagement with Australian Government agencies;
- working closely with the Federal Government to assist in the development of its critical minerals production tax incentive (CMPTI) strategy which, if implemented, has the potential to have a positive impact on the Project and AVL's electrolyte production costs; and
- developing a sustainability strategy to foster positive outcomes for the environment and the community.

## VANADIUM IN ENERGY STORAGE

**Final payment received for vanadium electrolyte facility and VFB grant**

AVL has successfully completed work and received the final payment of $0.9 million[8] from the $3.69 million Australian Government Modern Manufacturing Initiative – Manufacturing Translation Stream grant awarded in 2021.[9] The grant was awarded as matched funding, mainly to support the design and construction of the Company's vanadium electrolyte manufacturing facility, which has successfully produced its first high purity vanadium electrolyte.[10]

Vanadium electrolyte is a key component of VFBs. These batteries are well suited to large-scale energy storage applications, as required for electrical grids increasingly powered by renewable energy. They offer a high capacity for energy storage and a long cycle life, having the ability to be charged and discharged repeatedly with minimal degradation over the extremely long battery life.

The grant funding also provided for the inclusion of the design of an ultra-high purity processing circuit to produce chemical and master-alloy grade vanadium pentoxide as part of the development of the Project. The Company recently announced the achievement of ultra-high purity 99.9% $V_2O_5$

[8] See ASX announcement dated 21 May 2024 *'Final Payment Received for Vanadium Flow Battery Grant'*
[9] See ASX announcement dated 22 July 2021 *'AVL Awarded $3.69M Federal Government Manufacturing Grant'*
[10] See ASX announcement dated 19 March 2024 *'Battery Ready Vanadium Electrolyte Produced'*

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through testwork undertaken with Australia's Nuclear Science and Technology Organisation (ANSTO).[11]

***Figure 3 - First vanadium electrolyte produced by AVL's vanadium electrolyte manufacturing facility***

The grant also part-funded the Company's development of a prototype residential VFB and stand-alone power system based on a VFB for the Australian market. The prototype residential VFB has been designed with 5kW of power and 15kWh of stored energy capacity. With the battery's characteristics of flexibility, minimal degradation in performance over a 30-year lifespan and non-flammability, it has the potential to be a highly desirable product for homeowners looking for an alternative to a lithium-ion battery solution. Development of the prototype continues and it is expected to be installed at a residential property in due course for further testing by AVL's wholly owned VFB-focused subsidiary VSUN Energy.

**Vanadium electrolyte**

Since construction of the vanadium electrolyte manufacturing facility was completed,[12] AVL has undertaken a range of activities to prepare for commercial production, including finalising the overall facility set up and continuation of stage two work. Third-party laboratory tests within Australia have

[11] See ASX announcement dated 25 March 2024 *'Achievement of Ultra-High Purity 99.9% Vanadium Product'*
[12] See ASX announcement dated 15 December 2023 *'Vanadium Electrolyte Facility Construction Complete'*

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confirmed the quality and VFB-compliant specifications of the electrolyte and seven samples have been sent to VFB manufacturers and associated parties to qualify for use in VFBs.

**Battery projects update**

VSUN Energy has several VFB projects underway with established and emerging battery manufacturers. VSUN Energy's current main projects are with key clients, IGO Ltd and Horizon Power.

***IGO Ltd***

During the quarter, VSUN Energy's VFB was deployed to IGO's Nova Nickel Operation alongside a ground mounted solar photovoltaic system.[13] Once commissioned, the VFB microgrid will play an important role in the water reticulation network at the site.

Site commissioning and control system integration with the standalone power system (SPS) are now well progressed, with VSUN Energy expecting to finalise the VFB microgrid site commissioning shortly. The project will then go through a process of operation, data collation and system refinement in the field over an anticipated 12-month period. The SPS sector in mining, remote communities and microgrids is anticipated to be a significant market for VFB technology.

***Horizon Power***

VSUN Energy received delivery of the VFB for the Horizon Power Kununurra project earlier this year.[14] The battery was supplied by UK AIM-listed Invinity Energy Systems. Q1 of 2024 also saw the delivery of the power control system (PCS), in addition to the PCS control room. The initial phase of the Factory Acceptance Testing (FAT) for this solution was conducted during the quarter.

The final stage of the FAT is expected to be completed shortly, with subsequent delivery of the VFB to site for Site Acceptance Testing (SAT).

VSUN Energy has hosted a variety of interested parties at the electrolyte manufacturing facility in Perth, to showcase the VFB and provide a comprehensive overview of AVL's pit-to-battery strategy. These visits have been invaluable to both AVL and VSUN Energy for the interest it has garnered and the ability for industry and utility players to physically view a commercialised VFB and vanadium electrolyte manufacturing facility.

***Tenders***

VSUN Energy has submitted tender responses for several projects across Australia, ranging up to

[13] See ASX announcement dated 11 November 2024 *'IGO's Nova Nickel Operation to Trial VSUN Energy Vanadium Battery Standalone Power System'* and ASX announcement dated 20 June 2022 *'Vanadium Battery Standalone Power System Update'*

[14] See ASX announcement dated 28 July 2023 *'Horizon Power to Purchase VFB for Long Duration Energy Storage Pilot'* and ASX announcement dated 8 January 2024 *'Horizon Power Vanadium Flow Battery Arrives in WA'*

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35MWh in battery energy storage capacity. These tenders are currently ongoing and represent potential electrolyte supply and/or VFB project opportunities.

**Appointments to accelerate scale uptake of vanadium flow batteries in Australia**

AVL continues to build a team with world leading expertise across the full vanadium value chain, from mining through processing, electrolyte production, battery systems and into energy markets. During the quarter, AVL appointed Steve Banning as Principal Advisor and Dr Yifeng Li as Product Development Manager for its wholly owned subsidiary VSUN Energy. These appointments will be pivotal to unlocking AVL's ambition to contribute to the uptake of VFBs for use in large scale, long duration energy storage systems.

Steve brings 25 years of deep energy market experience, including as Managing Director of Epic Energy. Steve has led the delivery of complex energy projects and has a strong understanding of energy customer needs, as well as having delivered a considerable number of complex energy supply agreements. At AVL, Steve will lead the deployment of strategies to commercialise and scale VSUN Energy's energy storage solutions, services and customer engagement.

Yifeng is an expert in battery energy storage systems, committed to enabling the adoption of VFBs for long duration energy storage. His strong technical and economic expertise in long duration energy storage covers fundamental electrochemistry, battery stack/module design and optimisation and large scale system integration, in addition to the operational control and energy management systems of VFB based long duration energy storage solutions.

## CORPORATE

**Executive – Integration, Ian Prentice**

Subsequent to the quarter, on 26 July 2024, Ian Prentice, AVL's Executive – Integration and former Managing Director of TMT, departed the Company. Ian led TMT to a pivotal point in the development of the vanadium industry in WA and in his role as Executive – Integration at AVL has been a key contributor to the successful merger of TMT and AVL. The release of the results of the first phase of the OFS has highlighted that the integration process is now substantially complete, with Ian's role having met its objectives. Ian has consistently demonstrated his commitment to people and his passion for the success of the Project and the broader industry.

The Company would like to express sincere thanks to Ian and extend best wishes to him for his future endeavours.

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**Government funding**

The Company continues to benefit from a Federal Government grant of up to $49 million, with AVL recently receiving the second progress payment of $14.7 million.[15] AVL has now received $24.5 million under the Grant. This grant funding allows AVL to pursue opportunities to minimise project execution risks through improved project definition, including detailed engineering of key infrastructure and acceleration of the project schedule, for example, by ordering long-lead equipment.

**Cash and Expenditure**

The Company had cash on hand of $36.4 million as at 30 June 2024 (31 March 2024: $24.8 million), including restricted cash of $0.4 million and the funding from the Grant.

Staff costs of $1,401k (including Director's fees; refer to Item 1.1(d) of the Appendix 5B) for the June quarter reflect staff salaries not capitalised to the Project and include all oncosts.

Net cash outflow from investing activities of $3,669k in the June quarter mainly related to ongoing work to advance the Project ($3,481k; refer to Item 2.1(d) of the Appendix 5B), which included project-related staff costs and external costs associated with progressing the OFS, metallurgical studies, environmental approvals and Traditional Owner engagement. The Company also continued work on the IGO battery and the Horizon Power contract, with cash outflows of $125k during the quarter (refer to Item 2.1(c) of the Appendix 5B) associated with these activities.

**Related Party Payments**

The aggregate amount of payments to related parties and their associates included in the quarter's cash flows from operating activities was $158k, comprising Directors' fees and related superannuation.

For further information, please contact:

**Graham Arvidson, CEO**
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*This announcement has been produced in accordance with the Company's published continuous disclosure policy and has been approved by the Board.*

[15] See ASX announcement dated 20 June 2024 *'$14.7 Million Received from Federal Grant'*

## ABOUT AUSTRALIAN VANADIUM LTD

AVL is a resource company focused on vanadium, seeking to offer investors a unique exposure to all aspects of the vanadium value chain – from resource through to steel and energy storage opportunities. AVL is advancing the development of its world-class Australian Vanadium Project at Gabanintha. The Australian Vanadium Project is one of the most advanced vanadium projects being developed globally, with 395.4Mt at 0.77% vanadium pentoxide ($V_2O_5$), containing a high grade zone of 173.2Mt at 1.09% $V_2O_5$, reported in compliance with the JORC Code 2012 (see ASX announcement dated 7 May 2024 *'39% Increase in High Grade Measured and Indicated Mineral Resource'*).

VSUN Energy is AVL's 100% owned renewable energy and energy storage subsidiary which is focused on developing the Australian market for vanadium flow batteries for long duration energy storage. VSUN Energy was established in 2016 and is widely respected for its VFB expertise. AVL's vertical integration strategy incorporates processing vanadium to high purity, manufacturing vanadium electrolyte and working with VSUN Energy as it develops projects based on renewable energy generation and VFB energy storage.

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## MINERAL RESOURCE ESTIMATE

The Australian Vanadium Project – Mineral Resource estimate by domain and resource classification using a nominal 0.4% $V_2O_5$ wireframed cut-off for low-grade and nominal 0.7% $V_2O_5$ wireframed cut-off for high grade (total numbers may not add up due to rounding).

| Zone | Category | Mt | $V_2O_5$ % | Fe % | $TiO_2$ % | $SiO_2$ % | $Al_2O_3$ % |
|---|---|---|---|---|---|---|---|
| HG | Measured | 30.6 | 1.14 | 46.3 | 12.9 | 7.4 | 6.2 |
| | Indicated | 74.8 | 1.11 | 47.5 | 12.6 | 7.0 | 5.7 |
| | Inferred | 67.9 | 1.06 | 45.3 | 12.1 | 9.0 | 6.6 |
| | **Subtotal** | **173.2** | **1.09** | **46.5** | **12.5** | **7.8** | **6.1** |
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| | **Subtotal** | **204.3** | **0.50** | **25.3** | **6.8** | **28.2** | **15.5** |
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| | Inferred | 228.2 | 0.66 | 31.4 | 8.3 | 22.6 | 12.6 |
| | **Subtotal** | **395.4** | **0.77** | **34.8** | **9.3** | **19.1** | **11.4** |

*Note: Totals may not add up due to rounding*

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## TENEMENT SCHEDULE

Tenement information as required by Listing Rule 5.3.3 for the quarter ended 30 June 2024

| Location | Project | Tenements | Economic Interest | Notes | Change in Quarter % |
|---|---|---|---|---|---|
| Western Australia | The Australian Vanadium Project | E 51/843 | 100% Granted[1] | | Nil |
| | | E 51/1534 | 100% Granted[1] | | Nil |
| | | E 51/1899 | 100% Granted | | Nil |
| | | E 51/1943 | 100% Granted | | Nil |
| | | E 51/1944 | 100% Granted | | Nil |
| | | E 51/2067 | 100% Granted | | Nil |
| | | E 51/2215 | | 100% on Application | Nil |
| | | L 51/116 | 100% Granted | | Nil |
| | | L 51/119 | | 100% on Application | Nil |
| | | L 51/130 | | 100% on Application | Nil |
| | | | | | |
| | | L51/132 | | 100% on Application | Nil |
| | | L51/133 | | 100% on Application | Nil |
| | | M 51/878 | 100% Granted[1] | | Nil |
| | | M 51/897 | | 100% on Application[1] | Nil |
| | | P 51/3073 | 100% Granted | | Nil |
| | | P 51/3074 | 100% Granted | | Nil |
| | | P 51/3075 | 100% Granted | | Nil |
| | | P 51/3076 | 100% Granted | | Nil |
| | | | | | |
| | | P 51/3298 | | 100% on Application | Nil |
| | | E 51/1510-I | 100% Granted | | Nil |
| | | E 51/1818 | 100% Granted | | Nil |
| | | E 51/2056 | | 100% on Application | Nil |
| | | E 51/2117 | | 100% on Application | Nil |
| | | G 51/29 | 100% Granted | | Nil |
| | | G 51/30 | 100% Granted | | Nil |
| | | G 51/31 | 100% Granted | | Nil |
| | | G 51/32 | | 100% on Application | Nil |
| | | G 51/34 | | 100% on Application | Nil |
| | | L 51/101 | 100% Granted | | Nil |
| | | L 51/102 | 100% Granted | | Nil |
| | | L 51/117 | 100% Granted | | Nil |
| | | L 51/121 | 100% Granted | | Nil |
| | | L 51/123 | | 100% on Application | Nil |
| | | L 51/125 | | 100% on Application | Nil |

| | | | | | |
|---|---|---|---|---|---|
| | | L 51/128 | | 100% on Application | Nil |
| | | L 51/129 | | 100% on Application | Nil |
| | | L 51/134 | | 100% on Application | Nil |
| | | L 51/135 | 100% Granted | | 100% |
| | | M 51/883 | 100% Granted | | Nil |
| | | M 51/884 | 100% Granted | | Nil |
| | | P 51/3140 | 100% Granted | | Nil |
| **Western Australia** | **Nowthanna Hill** | M 51/771 | 100% Granted | | Nil |
| **Western Australia** | **Peak Hill** | E 52/3349 | 0.75% Net Smelter Return (NSR)<br>Production Royalty | | Nil |
| **Western Australia** | **Tumblegum South** | M 51/888 | 0.75% NSR<br>Production Royalty | | Nil |
| **Western Australia** | **Coates** | E 70/4924-I | 100% Granted | | Nil |
| | | E 70/5588 | 100% Granted | | Nil |
| | | E 70/5589 | | 100% on Application | Nil |

*Note 1: Australian Vanadium Limited retains 100% rights in V/U/Co/Cr/Ti/Li/Ta/Mn & iron ore on The Australian Vanadium Project. Bryah Resources Limited holds the Mineral Rights for all other minerals.*

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## ASX CHAPTER 5 COMPLIANCE AND CAUTIONARY AND FORWARD-LOOKING STATEMENTS

### ASX Listing Rule 5.23

The information in this announcement relating to mineral resource estimates for the Australian Vanadium Project is extracted from the announcement entitled '39% Increase in High Grade Measured and Indicated Mineral Resource' released to the ASX on 7 May 2024. The relevant announcement is available on the Company's website www.avl.au.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, 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 Company confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original market announcements.

### Forward-Looking Statements

This release may contain certain forward-looking statements with respect to matters including but not limited to the financial condition, results of operations and business of AVL and certain of the plans and objectives of AVL with respect to these items.

These forward-looking statements are not historical facts but rather are based on AVL's current expectations, estimates and projections about the industry in which AVL operates and its beliefs and assumptions.

Words such as "anticipates," "considers," "expects," "intends," "plans," "believes," "seeks," "estimates", "guidance" and similar expressions are intended to identify forward looking statements and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the industry in which AVL operates.

These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties, and other factors, some of which are beyond the control of AVL, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. Such risks include, but are not limited to resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes. For more detailed discussion of such risks and other factors, see the Company's Annual Reports, as well as the Company's other filings.

AVL cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of AVL only as of the date of this release.

The forward-looking statements made in this announcement relate only to events as of the date on which the statements are made.

AVL will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this announcement except as required by law or by any appropriate regulatory authority.

# Appendix 5B

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

Name of entity

AUSTRALIAN VANADIUM LIMITED

| ABN | Quarter ended ("current quarter") |
|---|---|
| 90 116 221 740 | 30 JUNE 2024 |

| 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 | 89 | 261 |
| 1.2 | Payments for | | |
| | (a) exploration & evaluation | (102) | (224) |
| | (b) development | - | - |
| | (c) production | (196) | (635) |
| | (d) staff costs | (1,401) | (6,135) |
| | (e) administration and corporate costs | (614) | (6,460) |
| 1.3 | Dividends received (see note 3) | - | - |
| 1.4 | Interest received | 305 | 778 |
| 1.5 | Interest and other costs of finance paid | (35) | (147) |
| 1.6 | Income taxes paid | - | - |
| 1.7 | Government grants and tax incentives | 17,184 | 17,874 |
| 1.8 | Other | - | - |
| **1.9** | **Net cash from / (used in) operating activities** | **15,230** | **5,312** |

| | | | |
|---|---|---|---|
| **2.** | **Cash flows from investing activities** | | |
| 2.1 | Payments to acquire or for: | | |
| | (a) entities | - | - |
| | (b) tenements | - | - |
| | (c) property, plant and equipment | (125) | (7,072) |
| | (d) exploration & evaluation | (3,481) | (8,458) |
| | (e) investments | - | - |
| | (f) other non-current assets | - | - |

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| 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 (see note 3) | - | - |
| 2.5 | Other (provide details if material) | | |
| | Cash balance of acquired entity (Technology Metals Australia Limited) | - | 7,586 |
| | Fees associated with merger | (63) | (3,399) |
| **2.6** | **Net cash from / (used in) investing activities** | **(3,669)** | **(11,343)** |

| **3.** | **Cash flows from financing activities** | | |
|---|---|---|---|
| 3.1 | Proceeds from issues of equity securities (excluding convertible debt securities) | - | 15,671 |
| 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 | - | (388) |
| 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** | **-** | **15,283** |

| **4.** | **Net increase / (decrease) in cash and cash equivalents for the period** | | |
|---|---|---|---|
| 4.1 | Cash and cash equivalents at beginning of period | 24,889 | 27,198 |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above) | 15,230 | 5,312 |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above) | (3,669) | (11,343) |

| **Consolidated statement of cash flows** | | **Current quarter $A'000** | **Year to date (12 months) $A'000** |
|---|---|---|---|
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | - | 15,283 |
| 4.5 | Effect of movement in exchange rates on cash held | - | - |
| **4.6** | **Cash and cash equivalents at end of period** | **36,450** | **36,450** |

| **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 | 1,784 | 2,805 |
| 5.2 | Call deposits* | 34,270 | 21,695 |
| 5.3 | Bank overdrafts | - | - |
| 5.4 | Other (bank guarantees – restricted cash) | 396 | 389 |
| **5.5** | **Cash and cash equivalents at end of quarter (should equal item 4.6 above)** | **36,450** | **24,889** |

* Includes $19.3M to be spent on eligible activities as outlined in the Modern Manufacturing Initiative Collaboration Grant Agreement.

| **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 | 158 |
| 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**<br>*Note: the term "facility' includes all forms of financing arrangements available to the entity.*<br>*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. | | |
| | n/a | | |

| 8. | **Estimated cash available for future operating activities** | **$A'000** |
|---|---|---|
| 8.1 | Net cash from / (used in) operating activities (item 1.9) | 15,230 |
| 8.2 | (Payments for exploration & evaluation classified as investing activities) (item 2.1(d)) | (3,481) |
| 8.3 | Total relevant outgoings (item 8.1 + item 8.2) | 11,749 |
| 8.4 | Cash and cash equivalents at quarter end (item 4.6) | 36,450 |
| 8.5 | Unused finance facilities available at quarter end (item 7.5) | - |
| 8.6 | Total available funding (item 8.4 + item 8.5) | 36,450 |
| 8.7 | **Estimated quarters of funding available (item 8.6 divided by item 8.3)** | N/A |

*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.*

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?

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?

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?

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.*

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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: 31 JULY 2024

Authorised by: Board of Directors
(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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