

Pre-commencement Audit



for the

Dargues Gold Mine

8 February 2013

Prepared by:



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Pre-commencement Audit for the Dargues Gold Mine

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1. INTRODUCTION

1.1 SCOPE AND OBJECTIVES

This pre-commencement audit of the Dargues Gold Mine (the Mine) has been commissioned by Unity Mining Limited (the Company) to record the status of compliance with the conditional requirements of the following.

- NSW Project Approval 10_0054 (see **Appendix A**).
- Commonwealth EPBC Act Approval 2010 / 5770 (see **Appendix B**).
- Environment Protection Licence 20095 (see **Appendix C**).
- Mining Lease 1675 (see **Appendix D**).
- Water Licences 10BL605106, 10BL605107, 10BL605108 and 10BL605109 (see **Appendix E**).

RW Corkery & Co Pty Limited (RWC) understands that the Company proposes to commence the preparatory works and site establishment activities at the Mine on 11 February 2013. As a result, the principal objective of this audit has been the assessment of conditional requirements that are required to be completed prior to the commencement of construction operations. Notwithstanding this, compliance has also been assessed against all other relevant conditions.

1.2 AUDIT PERSONNEL

This audit has been prepared by Mr Mitchell Bland (BSc (Hons), MEconGeol, LLB(Hons)), Principal Environmental Consultant with RWC. Peer review of the audit report was undertaken by Mr Scott Hollamby (B.Env.Sc.(Hons), Certified Principal Environmental Auditor No. 109260), Senior Environmental Consultant with the same Company.

Mr Bland prepared the *Environmental Assessment* and a range of management plans and other documentation for the Mine and this audit is therefore not an independent audit. The audit does, however, reflect Mr Bland's intimate knowledge of the Mine documentation. Mr Hollamby has not previously been involved in the preparation of Mine-related documentation and provided a degree of independence during the review process.

1.3 REPORT FORMAT

This document comprises four sections and a set of appendices as follows.

- Section 1:** Introduces the audit and provides a range of background information.
- Section 2:** Provides an overview of the audit methodology and limitations.
- Section 3:** Provides a tabulated summary of the audit outcomes.
- Section 4:** Provides a consolidated list of recommendations arising from the audit and a brief explanation of the background for each recommendation.



Appendices: The conditional requirements for each of the identified approvals and licences, together with the actions and documentation required to establish compliance with each condition, whether the Mine is compliant or otherwise with the condition and relevant comments have been tabulated and are presented in a set of five appendices.

2. AUDIT METHODOLOGY AND LIMITATIONS

The audit was prepared by Mr Bland who has extensive background knowledge of the Mine, Mine Site, Mine-related documentation and the consultation that has been undertaken with relevant government agencies and the community.

No formal audit-specific site inspection or entry and exit meetings were undertaken. However, various telephone discussions and email exchanges were undertaken providing a range of documentation and information in relation to specific matters which RWC's records did not address. Where documented evidence was not available, reliance has been placed on verbal advice provided by Company personnel throughout the audit.

In summary, in completing the audit tables presented in **Appendices A to E**, reliance has been placed on:

- previous site visits and inspections (not undertaken for audit purposes);
- background knowledge and information in relation to the Mine, including documentation prepared by RWC and the Company available in RWC's records;
- information presented on the Project website (www.darguesreef.com.au);
- documentation provided by Company personnel; and
- verbal advice from Company personnel.

The following Company personnel assisted during preparation of the audit.

- Mr James Dornan – provided extensive documentation and verbal advice in relation to the status of particular conditions and more generally.
- Mr Greg Cozens – provided verbal advice in relation to the status of the *Mine Health and Safety Plan*.
- Ms Rebecca Bigg – provided photographic evidence in relation to fencing of the identified Aboriginal artefacts.

In light of the above, the audit relies upon the documentation and information held by RWC, information provided by the Company as well as previous site inspections undertaken for non-audit purposes. On this basis, it cannot be discounted that issues could exist within sections of the Mine Site that have been modified since Mr Bland's most recent site inspection on 11 October 2012 or were not inspected during that visit, or be present within documentation not prepared by or provided to Mr Bland.

3. AUDIT OUTCOMES

Table 1 presents an overview of the audit outcomes. In summary, compliance with the Mine's conditional requirements was classified as follows.

- Yes – Conditional requirement fully complied with.
- No – Conditional requirement partially or not complied with as at the date of the finalisation of the Audit (8 February 2013).
- Not yet applicable (NYA) – the conditional requirement does not yet apply and compliance could not be determined. For example, conditions relating to management of blasting operations could not be determined because blasting operations have not commenced.
- No longer relevant (NLR) – the conditional requirement has been superseded by a subsequent requirement. For example, a statement of commitment may be superseded by a requirement embodied in an approved management plan or a condition of the Project Approval in accordance with Condition 2(2) of the Project Approval.
- Noted – the condition does not impose a requirement on the Company or relates to the powers of the relevant government agency to undertake a particular action.

Table 1
Audit Outcome Summary

	Yes	No	NYA	NLR	Noted
NSW Project Approval 10_0054	60	1	144	30	5
Commonwealth EPBC Act Approval 2010/5770	6	0	21	0	0
Environment Protection Licence 20095	14	0	35	0	8
Mining Lease 1675	8	0	13	6	8
Water Licences 10BL605106, 10BL605107, 10BL605108 and 10BL605109	4	0	28	0	12

A single non-compliance related to a failure to complete a planning agreement with Palerang Council by 7 February as required by Condition 2(11) of Project Approval PA 10_0054. We are advised that completion of the agreement is imminent. This is unlikely to be considered by the Department of Planning and Infrastructure as a substantive non-compliance and it is recommended that approval be sought from the Department for an extension to the deadline (**Recommendation 1**).

4. RECOMMENDATIONS

Throughout the audit tables presented in **Appendices A to E**, a range of recommendations have been provided. The following presents a consolidated list of those recommendations (in bold), with explanations and commentary provided in italics.

- **Recommendation 1:**

Ensure the Department of Planning & Infrastructure provide formal notification of extension of time for signing of Planning Agreement with Palerang Council.

The Planning Agreement required by Project Approval Condition 2(11) to be completed within 12 months of the date of the approval, namely by 7 February 2013, has not been completed. As the Mine has yet to commence, this is unlikely to be viewed by the Department of Planning and Infrastructure as a substantive breach of the terms of the condition. As a result, an extension of time should be sought to prevent this becoming a permanent non-compliance in future independent audits.

- **Recommendation 2:**

Ensure that all noise monitoring requirements are fully implemented during Mine commencement.

The Noise Management Plan identifies a range of noise monitoring measures that will be implemented. Compliance against these requirements cannot be assessed prior to Mine commencement. However, systems, procedures, equipment and trained staff will be required to implement these requirements and these should be put in place prior to commencement to ensure identification of unexpected environmental issues and ongoing compliance with conditional requirements during the Mine commencement phase. Advised that a specialist noise consultant has been engaged to undertake attended noise monitoring during February.

- **Recommendation 3:**

Ensure that all air quality monitoring requirements are fully implemented during Mine commencement.

The Air Quality and Greenhouse Gas Management Plan identifies a range of air quality monitoring measures that will be implemented. Deposited dust monitoring has commenced. However, PM₁₀ monitoring is yet to commence. Systems, procedures, equipment and trained staff will be required to implement the PM₁₀ monitoring requirements and these should be put in place prior to commencement to ensure identification of unexpected environmental issues and ongoing compliance with conditional requirements during the Mine commencement phase.

- **Recommendation 4:**

Ensure that all water monitoring requirements are fully implemented during Mine commencement.

The Water Management Plan identifies a range of water-related monitoring measures that will be implemented. Some surface water quality and flow, and some groundwater quality and level monitoring has been implemented. However, not all monitoring locations/monitoring bores are constructed. Systems, procedures, equipment and trained staff will be required to implement these requirements and these should be put in place prior to commencement of relevant aspects of the Mine to ensure identification of unexpected environmental issues and ongoing compliance with conditional requirements during the Mine commencement phase. For example, Tailings Storage Facility monitoring bores should be constructed and monitoring should commence prior to placement of tailings within the facility.

- **Recommendation 5:**

Ensure that the on-site biodiversity offset program is fully implemented during Mine commencement.

The Biodiversity Management Plan identifies a range of on-site biodiversity offset-related measures that must be implemented. A range of these, including fencing and marking out of areas of vegetation to be preserved, will be critical during Mine commencement.

- **Recommendation 6:**

Ensure that all biodiversity monitoring requirements are fully implemented during Mine commencement.

The Biodiversity Management Plan identifies a range of on-site biodiversity related monitoring programs that will be implemented throughout the life of the Mine. Monitoring during the early years of the Mine will be critical for determining the final rehabilitation completion criteria during Mine closure. This will be an important factor in ensuring that rehabilitation is undertaken appropriately and that rehabilitation/Mining Lease security is returned promptly following completion of the Mine. While some monitoring has commenced, the program is yet to be fully implemented.

- **Recommendation 7:**

Ensure that all traffic-related commitments in the *Traffic Management Plan* are fully implemented during Mine commencement.

The Traffic Management Plan identifies a range of traffic-related measures that will be implemented. Compliance against these requirements cannot be assessed prior to Mine commencement. Not all requirements of the Plan are required to be completed prior to construction, however, completion of relevant commitments as soon as practicable following commencement will minimise adverse traffic-related impacts on the community and will provide a highly visible indication of goodwill on the Company's behalf.

- **Recommendation 8:**

Ensure that the *Mining Operations Plan* is updated prior to the commencement of paste fill operations.

Project approval has been granted for the use of paste fill. However, the currently approved Mining Operations Plan has yet to be amended to include paste fill. Paste filling operations cannot commence until that is complete. Approval of a Mining Operations Plan modification typically requires six to eight weeks following submission.

- **Recommendation 9:**

Ensure that all monitoring requirements identified in the *Environmental Management Strategy* are fully implemented during Mine commencement.

The Environmental Management Strategy provides a useful summary of all environmental monitoring requirements for the Mine. Some aspects of the identified monitoring program have been implemented, with others to commence during and following construction. Ensuring compliance with the requirements of that document during Mine commencement will ensure that environmental issues are identified before they become significant and will assist the Company avoid breaches of conditional requirements of its various licences.

- **Recommendation 10:**

Implement a procedure to ensure that annual reporting requirements identified by each approval and licence are aligned and that as far as practicable, a single *Annual Report* will contain the information required under all approvals and licences.

Each of the approvals and licences identified in Section 1.1 of this document require preparation of some form of annual report describing the Mine activities and environmental performance as follows.

- *Project approval – Annual Review.*
- *EPBC Act approval – Annual Report.*
- *Mining lease – Annual Environmental Management Report.*
- *Environment Protection Licence – Annual Return.*
- *Water licences – Annual Report.*

With the exception of the Environment Protection Licence Annual Return which is a form provided by the Environment Protection Authority, each of the above requires a written report to be prepared by the Company. By ensuring that the anniversary dates for each of the approvals and licences coincide and that the requirements of each are addressed, the Company would be able to produce a single Annual Report. This report could also be used for internal reporting purposes. This would significantly limit duplication and facilitate environmental management of the Mine for Mine management, regulators and the public.

- **Recommendation 11:**

Ensure the boundary of the Tableland Basalt Forest EEC is clearly identifiable to ‘on-ground’ personnel prior to commencing disturbance activities.

Commitment 5.1 of Project Approval 10_0054 identifies that no areas of mapped Tableland Basalt Forest EEC are to be disturbed. Similarly, Condition 2 of EPBC Act Approval 2010/5770 requires that no more than 0.2ha an of the community be disturbed by the Mine. In order to prevent inadvertent clearance and to achieve compliance with both requirements, the boundary of the community as identified in Appendix 4 of Project Approval 10_0054 should be identified on the ground through fencing or, in the short term, with pegs and tape.

- **Recommendation 12:**

Prepare a detailed *Grazing Management Plan* identifying management practices for the on-site biodiversity offset lands as soon as practicable.

A Grazing Management Plan will be required to ensure that the grassed areas within the Mine Site are appropriately managed to ensure that the commitment to encourage regeneration of native grassland species is achieved. This plan will be required to be implemented soon after completion of the access road.

- **Recommendation 13:**

Commence review of the groundwater model as soon as possible and finalise prior to the commencement of mining operations.

Condition 7 of EPBC Act Approval 2010/5770 and Commitment 6.4e of Project Approval 10_0054 require the assumptions included in the groundwater model be reviewed through further data collection and test work and the model be rerun to further refine the previously calculated groundwater-related impacts. This must be complete prior to the commencement of mining operations, interpreted by Company personnel as the commencement of the decline. Given the time required to complete the review, this work should commence as soon as possible.

- **Recommendation 14:**

Prepare a formal site plan database, including areas of environmental sensitivity.

A formal system for managing spatial information will be critical for Mine management, operational staff and contractors to ensure that Mine-related activities are undertaken in the manner approved and that areas of environmental sensitivity are identified and protected. This database should be established as soon as practicable

- **Recommendation 15:**

Ensure that a detailed revegetation and amelioration program for the Natural Temperate Grassland and Tableland Basalt Forest EECs is prepared and implemented as soon as practicable.

The Biodiversity Management Plan, as approved, provides a range of general revegetation and amelioration measures to be implemented. These should be further refined and developed and the resulting plan(s) should be implemented as soon as practical to ensure the ongoing resilience and biodiversity value of these communities. The plan for amelioration of the Natural Temperate Grassland may be incorporated into the Grazing Management Plan (see Recommendation 13).

- **Recommendation 16:**

Ensure that the Commonwealth Department of Sustainability, Environment, Water, Population and Communities is consulted in relation to implementation of progressive rehabilitation, possibly through involvement in the NSW Division of Resources and Energy annual reporting process.

Condition 15 of EPBC Act Approval 2010/5770 requires implementation of progressive rehabilitation. This is also a requirement of Division of Resources and Energy and is typically managed through that Department's Annual Environmental Management Plan review process. Typically that process includes relevant NSW government agencies reviewing the draft document and attending a site meeting prior to appraising the report. To limit duplication, the Company should ensure that the Department of Sustainability, Environment, Water, Population and Communities is included in that consultation process.

- **Recommendation 17:**

Provide notification to the Department of Sustainability, Environment, Water, Population and Communities of project commencement by 25 February (assuming an 11 February commencement date).

Condition 20 of EPBC Act Approval 2010/5770 requires notification of Department of Sustainability, Environment, Water, Population and Communities within 10 business days of the commencement of construction. This notification should be provided by 25 February 2013. Advised that notification provided to NSW agencies. Similar notification may also have been provided to the Department of Sustainability, Environment, Water, Population and Communities.

- **Recommendation 18:**

Ensure that procedures are in place to record all environmental management measures monthly in a format suitable for incorporation into an annual report.

Extensive environmental monitoring and reporting will be required throughout the life of the Mine. In order to ensure that all relevant information is captured, reviewed in a timely manner and presented in a format suitable for use by Mine management, regulators and the general public, a standard reporting system should be developed and implemented. Ideally this system would provide a consolidated monthly report for Mine management and uploading to the Mine website. In addition, annual report preparation would be significantly simplified if these reports could then simply be consolidated to form the basis of the Mine's annual report. Some components of a standardised monitoring reporting system are in place, however, a consolidated system is required.

- **Recommendation 19:**

Maintain records indicating the date of approval by the NSW Department of Planning and Infrastructure and date of uploading for all documentation.

Condition 26 of EPBC Act Approval 2010/5770 requires all management plans to be uploaded to the Mine website within 1 month of being finalised. Company personnel interpret this condition as within one month of approval by the NSW Department of Planning and Infrastructure. As a result, records recording the date of approval and of uploading will be critical for demonstrating compliance with Condition 26.

- **Recommendation 20:**

Ensure that *Mines Health and Safety Management Plan* is submitted to Division of Resources and Energy prior to commencement of construction.

A Mines Health and Safety Management Plan is a requirement of the Mines Health and Safety Act 2004. Such a plan should be submitted to the Department of Resources and Energy prior to the commencement of construction.

Appendices

(No. of pages including blank pages = 150)

- Appendix 1 Implementation of Project Approval 10_0054 Conditions (Including Modification 1 dated 12/07/12)
- Appendix 2 Implementation of Conditions for EPBC Approval 2010/5770
- Appendix 3 Implementation of Conditions for Environment Protection Licence 20095
- Appendix 4 Implementation of Conditions for Mining Lease 1675
- Appendix 5 Implementation of Conditions for Water Licences 10BL605106, 10BL605107, 10BL605108, and 10BL605109



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