



Tomingley Gold Operations
Independent Environmental Audit
Report

June 2015

Executive summary

GHD Pty Ltd (GHD) was commissioned by Tomingley Gold Operations (TGO) to conduct an independent audit of the compliance of the mining operations at Tomingley. The Minister for Planning approved extractive operations at the mine pursuant to Section 75J of the *Environmental Planning and Assessment Act 1979* on 24 July 2012 (the Project Approval).

The Tomingley Gold Mine is located at Tomingley in central western NSW, between the centres of Dubbo and Parkes. Operations at TGO commenced in January 2014, extracting and processing gold on site.

Condition 8 of Schedule 5 of the Project Approval requires an Independent Environmental Audit to be undertaken after one year of mining operations and then every three years thereafter. This represents the first independent environmental audit for the site and this report presents the audit findings for the 2015 independent environmental audit.

At the time of the audit, a number of positive measures were observed which demonstrated compliance with many of the requirements of the Project Approval 09_0155 and Environment Protection Licence (EPL) 20169.

An Environmental Management Strategy (EMS) had been prepared for the site which included the programs and plans developed in accordance with the Project Approval and provides guidance on the management and monitoring tasks as well as frequency for these to be undertaken on site. The EMS has not been updated since final approvals/licences were received and operations commenced, as such it does not include the full suite of monitoring required by EPL 20169.

Environmental monitoring for the full range of parameters required by the EPL and Project Approval were being undertaken for the site. However TGO are reactively managing exceedances of dust and noise performance criteria rather than implementing measures to proactively manage emissions and minimise these exceedances through modifications to on site activities when conditions are reaching the criteria.

This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.4 and the assumptions and qualifications contained throughout the report.

Table of contents

1.	Introduction.....	1
1.1	Introduction	1
1.2	Scope of the audit.....	1
1.3	Audit team members.....	2
1.4	Limitations	2
2.	Methodology.....	3
2.1	Review of documentation	3
2.2	Consultation with relevant agencies	4
2.3	Site audit and inspection.....	4
2.4	Reporting	5
3.	Key findings.....	6
3.1	Environmental performance and effects	6
3.2	Assessment of compliance	7
3.3	Adequacy of strategies, plans and programs	10
4.	Recommendations	13
4.1	Corrective Actions.....	13
4.2	Recommendations	14

Table index

Table 1	Audit Scope References	5
Table 2	Summary of Compliance.....	7
Table 3	Summary of Corrective Actions	13
Table 4	Summary of Recommendations	14
Table 5	Project Approval Conditions – Schedule 2	18
Table 6	Project Approval Conditions – Schedule 3	23
Table 7	Project Approval Conditions – Schedule 4	66
Table 8	Project Approval Conditions – Schedule 5	68
Table 9	Statement of Commitments	76
Table 10	Environment Protection Licence	132
Table 11	Mining Lease.....	151

Appendices

Appendix A – Audit Checklist

Appendix B – Consultation with Regulators

1. Introduction

1.1 Introduction

Tomingley Gold Operations (TGO) is a wholly owned subsidiary of Alkane Resources Ltd. TGO is a medium-sized gold project with approximately 921,000 ounces of gold in the current defined resource space, with an aim to produce 50-60,000 ounces of gold per year over the next 10-12 years.

Mining commenced on the site in January 2014 with three open cut mines (Wyoming One, Wyoming Three and Caloma). The project includes a process plant with associated residue storage facility.

TGO is currently operating the mine in accordance with the following approvals:

- Project Approval 09_0155
- Environment Protection Licence (EPL) 20169
- Mining Lease (ML) 1684.

GHD Pty Ltd (GHD) was commissioned by TGO, and approved in advance by the Department of Planning and Environment (DP&E), to conduct an independent environmental audit of TGO's compliance with the requirements of Project Approval 09_0155.

This report responds to the audit scope as outlined below.

1.2 Scope of the audit

The scope of the audit was defined by Condition 8 of the Conditions of Consent as follows:

"One year after mining operations commence, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. The audit must:

- a) Be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
- b) Include consultation with the relevant agencies;
- c) Assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- d) Review the adequacy of strategies, plans or programs required under the abovementioned approvals;
- e) Recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.

The methodology of the audit is outlined in Section 2. The period of the audit is January 2014 to December 2014 (the reporting period).

1.3 Audit team members

Maurice Pignatelli, Demelza Scott and Evan Smith undertook the audit at the request of TGO. The audit team were approved by DP&E in an email dated 28 January 2015 to undertake this audit. The GHD audit team and Tomingley representatives are listed below:

- Maurice Pignatelli (GHD) – Lead Auditor
- Demelza Scott (GHD) – Auditor
- Evan Smith (GHD) – Auditor and Air and Noise Specialist
- Mark Williams (TGO) – Manager, Environment and Community
- Addy Watson (TGO) – Environmental Officer
- Simone Painter (TGO) – Processing Manager.

1.4 Limitations

This report: has been prepared by GHD for Tomingley Gold Operations and may only be used and relied on by Tomingley Gold Operations for the purpose agreed between GHD and the Tomingley Gold Operations as set out in section 0 of this report.

GHD otherwise disclaims responsibility to any person other than Tomingley Gold Operations arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in the proposal. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Tomingley Gold Operations and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Methodology

The audit was carried out in accordance with the requirements of ISO 19011:2003 'Guidelines for quality and/or environmental management systems auditing'. In particular, the GHD team conducted the audit considering the following:

- the key principles of auditing including the requirement of auditors to conduct themselves in an ethical manner, report truthfully and accurately, be diligent and have the appropriate competency to conduct the audit, be independent, and apply an evidence-based approach to conducting the audit.
- the audit objectives, scope and criteria were based on the Conditions of Consent. The scope of the audit was limited to compliance with the conditions of Project Approval 09_0155, Statement of Commitments, ML 1684 and EPL 20169, the environmental performance of the project, and the adequacy of strategies plans or programs under the approval.
- an appropriate audit team was selected with the skills in air and noise, erosion and sediment control, and environmental auditing to ensure that an adequate assessment of compliance with the Conditions of Consent could be made.
- relevant documentation (as detailed below) was reviewed prior to the audit to make an initial determination of conformity of the system to the requirements of the Conditions of Consent, and to prepare an audit checklist containing appropriate questions to address during the site audit.
- informal audit opening and closing meetings were conducted with the auditee to explain the format of the audit upfront and to highlight preliminary audit findings at the conclusion of the site audit.
- verifiable evidence was collected and recorded throughout the audit and evaluated against the Conditions of Consent to determine conformity or non-conformity.
- a complete and accurate report was prepared and distributed to provide a record of the audit and its findings.

2.1 Review of documentation

GHD reviewed documentation relevant to the operations at TGO, this included:

- Management plans referenced in the planning approval and other instruments
- Monitoring and calibration records
- Correspondence with relevant stakeholders including authorities
- Inspection checklists
- Site procedures
- Training materials
- Reports prepared as required in the planning approval and other instruments
- Contractual documents with external service providers, and
- Agendas and minutes of meetings.

The documentation sighted by the auditors is referenced in the compliance tables presented in Appendix A.

2.2 Consultation with relevant agencies

To satisfy Condition 8 of the Project Approval, GHD consulted with the following agencies prior to the site audit:

- DP&E
- Environment Protection Authority (EPA)
- Department of Trade & Investment (T&I)
- Office of Environment and Heritage (OEH)
- Narromine Shire Council (NSC).

A letter was sent to each of the abovementioned agencies advising them of the upcoming audit, GHD's role in conducting the audit and invited comment on TGO's performance with the requirements of the approval that related to their agency. A sample letter is included in Appendix B.

GHD received comment from DP&E, EPA and T&I as shown in Appendix B and summarised below. OEH advised that, due to other work commitments, they were unable to provide comment. GHD did not receive a response from NSC.

The DP&E advised GHD that there were no specific issues that they sought the audit to target.

The EPA advised GHD that they wanted the audit to consider:

- Management and mitigation of dust and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies
- Surface water management and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies
- Management and mitigation of noise and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies
- Compliance with EPL 20169, and
- Compliance with relevant environmental management/compliance conditions of consent issued by DP&E.

Mike Young of NSW T&I advised via phone conversation with Demelza Scott on 26 February 2015 that they sought general adherence to the conditions of ML 1684.

2.3 Site audit and inspection

GHD undertook a site visit and audit at TGO on the 4, 5 and 18 March 2015. This included interviews with relevant personnel and observations guided by the audit criteria which addressed the conditions of the Project Approval, EPL, Mining Lease and Statement of Commitments.

The assessment of activities included:

- Document review and citing of a selected cross section of data, records, correspondence, procedures and management plans
- Observations of site including mining, water management infrastructure, chemical storage, biodiversity management and work areas
- Interviews with relevant personnel.

TGO personnel provided both soft and hard copies of documentary evidence to support TGO's compliance with the audit criteria.

2.4 Reporting

This report presents the findings of the TGO Independent Environmental Audit required by Condition 8 of Project Approval 09_0155. This report responds to the scope of the audit as outlined in Table 1.

Table 1 Audit Scope References

Requirement	Reference
Consultation with relevant agencies	Section 2.2 and Appendix B
Assess the environmental performance of the project, and its effects on the surrounding environment	Section 3.1
Assess whether the project is complying with the relevant standards, performance measures and statutory requirements	Section 3.2 and Appendix A
Review the adequacy of any strategies, plans and programs required by the Project Approval, and	Section 3.3
If necessary, recommend measures or actions to improve the environmental performance of the project or any strategy/plan/program.	Section 4

3. Key findings

3.1 Environmental performance and effects

At the time of audit, a number of positive measures were observed which demonstrated compliance with many of the requirements of the Project Approval and EPL. Challenges remained in the key areas of dust, noise and water management.

3.1.1 Air emissions

A review of the community enquiry database (complaints register) up until February 2015 and the exceedances of the dust criteria reveals that dust is an issue for the local community of Tomingley. This was also observed onsite during the audit with high levels of dust impacting on the nearest receptors as a result of strong winds and site activities. Dust management measures in the Dust Management Plan were not being effectively implemented.

The site is currently experiencing a prolonged period of dry conditions and a shortage of water for dust suppression makes dust management challenging.

TGO have an effective realtime dust monitoring system in place and adequate weather forecasting tools however the link between the monitoring systems and TGO management response requires improvement. A procedure needs to be developed that enables instant notification to site management resulting in implementation of the Dust Management Plans.

3.1.2 Noise

A review of the complaints register up until February 2015 and the exceedances of the noise criteria reveals that noise is an issue for the local community of Tomingley.

TGO have a realtime noise monitoring system in place however this is a reactive system as it requires a specialist consultant to filter through the data to determine mine site noise contribution to the overall noise level.

TGO are aware that certain mining operations and weather conditions will cause noise levels at the receptors in Tomingley that may exceed the criteria, however these have only triggered limited management response and implementation of the Noise Management Plan.

3.1.3 Water management

A review of the complaints register up until February 2015 reveals that water management is not a key issue for the local community of Tomingley with no complaints reported. TGO were however notified by NSW Office of Water (NOW) of a complaint by a neighbouring property who had drilled a groundwater bore, failed to locate groundwater. NOW investigated the incident and concluded that TGO had not impacted on the local groundwater.

Water management on site has proven challenging at TGO since operations commenced:

- The site was experiencing prolonged dry weather significantly restricting water harvesting opportunities from the site. Restricted water is impacting on the water balance of the site in particular for operation of plant, and dust suppression. Soil moisture levels are also hampering the commencement of rehabilitation activities. TGO are supplementing water supply from the raw water supply pipeline (from Narromine bore) and the adjacent Peak Hill gold mine.
- On two occasions, water has discharged offsite through unlicensed discharge points to the road reserve and farmland. These incidents were under investigation by the EPA. To prevent future incidents of unlicensed discharges and improve the performance of the site

during storm events, TGO have completed the construction of the clean and dirty water infrastructure and provided induction training of site personnel on the management of clean and dirty water.

Observations from the site audit were that the site is very dry, and at the time of audit there was no evidence of discharges occurring offsite. The site's water management infrastructure was observed to be constructed, however TGO personnel advised that the stormwater water management structures have not been implemented strictly in accordance with the ESCP as:

- Eastern Surface Water Diversion Structure was not constructed to achieve the specified erosion protection (c-factors)
- certain catchments have not achieved the percentage groundcover on disturbed areas.

It is therefore unclear whether the site would meet the objectives of the Blue Book.

3.2 Assessment of compliance

Table 2 presents a summary of compliance with conditions of the Project Approval 09_0155, EPL 20169, Statement of Commitments and ML 1684.

Table 2 Summary of Compliance

Compliance	Details	Compliance Status
Compliant	Full compliance with the requirements of the condition	314
Partially compliant	Met the major requirements of the condition	46
Non-compliant	Does not meet the main requirements of the condition	18
Not verified	Compliance could not be verified at the time of audit due to lack of data, information or inaccessibility at the time of audit	25
Not applicable	Condition was not applicable at the time of audit	35
Total number of conditions assessed		436

Overall, TGO demonstrated a high level of compliance with its statutory instruments however instances where compliance was not achieved are summarised below. Compliance status against each clause of the statutory instruments is presented in Appendix A.

3.2.1 Noise

The key compliance issues relating to noise were:

- TGO were not meeting the noise criteria set out in the Project Approval however they were in the process of entering into agreements with affected residents/landowners.
- Noise exceedances due to mine activity were identified at residence R3 and exceedances were also likely elsewhere within the town. In many cases the noise on the north western area of town was audible even though the noise levels complied at the noise monitoring station.
- As noise levels below the criteria could also be cause for annoyance, TGO adopted a proactive approach and were working towards applying acoustic treatments to all houses in the village where exceedances of the noise criteria is identified.
- An MOU was in place with two residents. TGO planned to acoustically treat up to 14 houses in total. TGO advised that they would delay notification to the DP&E until they had an understanding with all impacted landowners in town.

TGO had a real time noise management system operating at the site however the systems needed further refinement in order to provide more responsive noise management on site. In particular:

- TGO had experienced issues obtaining meaningful data from the real-time noise logger as they also captured noise from trucks and ambient noise from birds and insects. TGO used a noise consultant which analysed the data using filters and statistical noise intervals to exclude non mining related noises. This approach delayed response times to noise data and reduced the opportunity for proactive responses.
- Additional portable real time monitors were also used to gain more specific data from key areas of the village.
- TGO had recently signed up with Weatherzone for better forecasting that would be incorporated with the site weather station.
- Temperature inversion was not monitored however noise complaints had triggered changes in fleet operation.

TGO has a Noise Management Plan for the project which was approved by the Director General. It is noted however that the Noise Management Plan did not make reference to a noise model. TGO has advised that the noise model for the site was yet to be updated based on the latest mining arrangement and equipment.

TGO focused on providing building treatments to impacted residences, however effort is still needed to manage noise from the site in accordance with the NMP.

3.2.2 Air emissions

Ongoing air quality monitoring was undertaken at the nearest sensitive receptor to the north of the site. PM₁₀ was measured using a TEOM and was linked in real time to the site office. The data indicated that:

- Up until 22 October 2014 there were no exceedances of the PM₁₀ 24 hour criteria however there had been multiple instances since then where the levels had exceeded the criteria. These instances were reported to the EPA in the 2014 Annual Return. Following an Environmental Risk Audit with the EPA in March 2015, the EPA requested that future exceedance of licence conditions be reported to them via the Environment Line and email to the Dubbo EPA office.

- During the audit the 24 hr PM₁₀ dust levels were exceeding the criteria and no response to reduce dust was occurring. TGO had the technology in place to alert when limits were approaching but had not incorporated these into everyday site management.

TGO had an Air Quality and Greenhouse Gas Management Plan and a Dust SSP for the project. These documents included mitigation measures for dust during construction and operation. The plan also included a response plan with proactive management and planning for adverse weather. Greater commitment from TGO to implement the existing management plans was required.

TGO was in regular contact with the members of the community in particular those most exposed to mine dust and noise. However TGO did not have processes in place that ensured notification of affected landowners and/or tenants in writing of the exceedances as is required by the Project Approval.

3.2.3 Meteorological Monitoring

In order to calculate the temperature lapse rate, TGO would need to measure temperature at 10m high (which they do) however another meteorological station would be needed that is 50m high, which is not practical for a site such as this. The Industrial Noise Policy (INP) does allow alternative methods of calculation using data such as the sigma theta (wind deviation) which is used on site.

3.2.4 Soil and water

Incidents under investigation by the EPA

Since commencement of operations in January 2014, two incidents have occurred in the reporting period for this audit that may constitute breaches of the POEO Act and EPL 20169:

- Discharge of rainfall runoff through an unlicensed discharge point on 1, 7, 24, 26, 28 March and 4, 11 April 2014, and
- Discharge of dirty water from Sediment Basin 2 through an unlicensed discharge point on 1 June 2014.

On both occasions, TGO followed the reporting protocol outlined in EPL 20169. As this matter was subject to legal proceedings with the EPA at the time of the audit, this audit does not provide any further findings.

Flood studies

Site personnel were not aware of any assessments that had been undertaken to verify that surface water diversion structures constructed as part of the project do not increase the frequency of flooding on the Newell Highway.

Residue Storage Facility

TGO personnel advised that the RSF construction report was lodged with the Dam Safety Committee in accordance with the approval.

Macquarie Geotech were engaged to verify that the RSF was constructed in accordance with the Environmental Guidelines – Management of Tailing Storage Facilities (Vic DPI, 2004). It was reported that compaction did not achieve the permeability standard required by the Project Approval. There was no evidence to indicate that the achieved permeability standard was approved by the Director General.

Water Management Plan

TGO did not have a current WMP approved by the Director General. TGO prepared a WMP and submitted it to the DP&E on 18 July 2013. The WMP was not approved as it did not include six months of baseline groundwater monitoring data.

Site personnel advise that the six months of baseline groundwater monitoring data has now been collected. However the WMP has not been resubmitted as the water balance components of the plan were being updated.

3.2.5 Biodiversity

Offset Area

Since receipt of the Project Approval, there had been extensive negotiations between Local Land Services (LLS) and TGO regarding the offset areas in the Property Vegetation Plan (PVP) recently developed to protect and manage the offset areas at the mine site. This resulted in a change to the offset strategy set in the Project Approval. TGO is required to seek an addendum to the offset strategy in order for it to comply with this requirement and the agreement with the LLS.

Pest Strategy

TGO personnel indicated that there had been no significant populations of rabbits, hares or cats identified at the site. Foxes were spotted regularly. TGO were in consultation with adjoining land owners regarding their pest animal control programs. TGO monitored pest animals as part of site fauna monitoring, however TGO had not developed a strategy or procedure for pest animal management and had not undertaken any control measures.

3.3 Adequacy of strategies, plans and programs

3.3.1 Environmental Management Strategy (EMS)

The EMS acts as the overarching document for management of environmental issues at the site. It was however developed prior to obtaining final statutory approvals and commencement of operation of the site and therefore requires review and updating to ensure relevance to the operations on site, e.g. the EMS monitoring requirements need to include the full suite of parameters and frequency of monitoring prescribed by EPL 20169.

3.3.2 Noise Management Plan (NMP)

The NMP is an effective tool for the management of noise onsite however there is opportunity to improve its implementation. The real time noise monitoring program measures noise levels at the nearest noise sensitive receptor however the triggers have been difficult to set up to check mine site compliance and has been an ongoing issue at the site.

There are opportunities to be proactive in regards to noise management including to avoid working in certain areas during a temperature inversion and improving implementation of operational controls in the NMP.

It is recommended that TGO implement a formal process where the Environment and Community Manager (or other responsible person) alerts the site management about the onset of a temperature inversion or other climatic conditions that may exacerbate noise complaints from site operations.

3.3.3 Air Quality and Greenhouse Gas Management Plan (AQGGMP)

The AQGGMP is an effective tool for the management of dust onsite however there is opportunity to improve its implementation. The real time air quality monitoring program enables instant checking of the current dust levels at the nearest receptor however there is no alert system on the TEOM meaning that management of dust impacts is reactive and operations are not being matched to weather conditions.

The AQGGMP and Dust Management Plan have in place pre-emptive control measures including notifying crews during high wind conditions (above 32 km/hr) and relocating works to minimise dust. Reactive measures in the plans include reviewing operations and suspending operations if necessary.

It is recommended that TGO implement a formal process where the Environment and Community Manager (or other responsible person) alerts the site management to dust levels approaching the daily criteria or climatic conditions that may generate excessive dust from the site.

3.3.4 Biodiversity Management Plan (BMP)

The BMP may be an effective tool for the management of flora and fauna onsite however it was developed prior to agreeing on a final biodiversity offset strategy in the form of a property vegetation plan, therefore the strategy outlined is not what is proposed to be implemented. The strategies outlined for pre and post clearing surveys during construction, and fencing/sign posting of protected vegetation were generally effective in the management of flora and fauna at the site to date. An annual biodiversity monitoring program has commenced at the site. The BMP does not however include contingency plans to manage situations where the identified biodiversity offsets are not likely to achieve the desired outcomes, or a pest animal control strategy for the site however feral animals have not proven to be a significant environmental issue for the operations to date.

An update of the BMP would ensure that it captures the full range of measures being utilised to manage flora and fauna on and adjacent to the mine site.

3.3.5 Water Management Plan (WMP)

The site is currently not operating with an approved WMP however management measures being utilised in the absence of an approved WMP include surface and groundwater monitoring programs and their associated procedures, Pollution Incident Response Management Plan for notification and response to significant environmental incidents, and an Erosion and Sediment Control Plan (ESCP).

Site personnel advise that the ESCP has not been strictly implemented as designed hence it is unclear whether the site would achieve the objectives of the Blue Book. It is recommended that the Erosion Sediment Control infrastructure implemented at the site be evaluated to assess its performance against the objectives of the Blue Book.

An effective WMP should ensure that it includes a site water balance incorporating the operational data obtained in the first year of operations, a surface water management plan that includes up to date information on site water management infrastructure, operating rules for water storages and sediment basins, addresses licence conditions and reporting requirements for incidents and exceedances of criteria, and a groundwater management plan that includes modelling, performance criteria, and contingency plans based on the baseline groundwater monitoring and monitoring undertaken since operations commenced. TGO should also continue to train its personnel in the management of clean and dirty water on site to minimise the risk of future incidents.

3.3.6 Emergency Response Plan (ERP)

The ERP and Pollution Incident Response Management Plan (PIRMP) are effective tools in the management of incidents on site. It is essential that these documents can be used in conjunction with each other and that they refer to site specific procedures for responding to typical incidents particularly spills of the various types of hazardous chemicals maintained at site.

Ongoing efforts to update and implement the management plans required by the Project Approval are required to manage environmental performance of the site and reduce the incidence of exceedances.

4. Recommendations

4.1 Corrective Actions

The corrective actions identified during the audit, as detailed in Appendix A, are summarised in Table 3.

Table 3 Summary of Corrective Actions

Reference No.	Clause	Corrective Action
1	Project Approval Schedule 3, Clause 6 (c)(v)	Update the noise model developed by SLR based on most recent mine survey and mining equipment locations. Model to be updated with any recent source sound measurements over a range of meteorological conditions.
2	Project Approval Schedule 3, Clause 17	Implement the controls in the Dust SSP to prevent exceedances of the dust criteria.
3	Project Approval Schedule 3, Clause 25	Conduct a flood study to determine the impact of surface water diversion structures constructed as part of the project on flooding frequency on the Newell Highway.
4	Project Approval Schedule 3, Clause 27	Undertake a risk assessment in accordance with Environmental Guidelines – Management of Tailing Storage Facilities (Vic DPI, 2004) to determine whether the permeability standard achieved for the residue storage facility and associated collection pond is acceptable.
5	Project Approval Schedule 3, Clause 32	Finalise the Water Management Plan to address ensuring sufficient water for operations, water harvesting, flooding risk, water balance, surface and groundwater management plans addressing all of the requirements of Clause 32 (b) and (c), and submit it to DP&E for approval.
6	Project Approval Schedule 4, Clause 2	For noise and air quality exceedances, develop processes that allow timely review of the monitoring data and notification to affected residences in accordance with the Project Approval.
7	Project Approval Schedule 5, Clause 3	Develop a procedure that addresses notification and reporting requirements for instances of exceedances of performance criteria for both the EPA and DP&E.
8	Statement of Commitments Clause 4.8	Implement the temperature inversion monitoring and calculation capability of the weather station.
9	Statement of Commitments Clause 7.29	Finalise consultation with adjoining landholders and prepare a Pest Animal Control Strategy as relevant to the known populations of pest animals on the mine site.
10	Statement of Commitments Clause 11.11	Develop area-specific dust controls for the crushing and screening circuit and associated conveyors.
11	EPL Clause L4.5	Any future noise compliance reports need to include the Industrial Noise Policy modifying factor adjustments to the measured mine site noise levels.

4.2 Recommendations

The recommendations arising from the audit, detailed in Appendix A, are summarised in Table 4.

Table 4 Summary of Recommendations

Reference No.	Clause	Recommendation
1	Project Approval Schedule 3, Clause 3	Inform Planning of the progress towards achieving agreement with the relevant owner of affected residences/ land to generate higher noise levels.
2	Project Approval Schedule 3, Clause 5 (b)	Improve the ability for the real time weather system to predict when noise is likely to be an issue at receptors in town. This is to include wind speed and direction and the presence of a temperature inversion. It is recommended that TGO implement a formal process where the environmental manager (or other responsible person) alerts the site management about the onset of a temperature inversion.
3	Project Approval Schedule 3, Clause 5 (f)	TGO should investigate triggers in the real time noise monitoring system to enable them to undertake/schedule noisy events during these times.
4	Project Approval Schedule 3, Clause 14 (a)	Obtain DG approval for the Blast Management Plan.
5	Project Approval Schedule 3, Clause 20 (b)	Seek approval from the DG, following consultation with the EPA, regarding whether the TGO weather station is a suitable alternative for continuous real time temperature lapse rate.
6	Project Approval Schedule 3, Clause 31	Ensure that all parameters required to be monitored as part of Clause 31 are included in the monitoring program and assessed during each monitoring event.
7	Project Approval Schedule 3, Clause 33	Seek a change in biodiversity offset areas in the Project Approval to make it consistent with the areas approved by Local Land Services.
8	Project Approval Schedule 3, Clause 37 (g)	Consider the development of TARPs or equivalent for identifying and addressing potential risks to the successful implementation of the Biodiversity Offset Strategy.
9	Project Approval Schedule 3, Clause 43	Maintain records of heavy vehicle movements to demonstrate compliance with the requirement to limit movements to 8 per day.
10	Project Approval Schedule 3, Clause 48	Reference the Site Specific Procedures in the Emergency Management Plan for responding to incidents associated with the types of hazardous materials maintained at site.
11	Project Approval Schedule 3, Clause 49 (c)	Install bollards around inlet to the Sewerage Treatment Plant (STP) and around the STP to protect the infrastructure from onsite traffic movements.
12	Project Approval Schedule 5, Clause 1 (f)	Update the Environmental Management Strategy to include the environmental monitoring requirements of the current statutory approvals.
13	Project Approval Schedule 5, Clause 2	As management plans are progressively updated, include the identification of relevant environmental risks and the management controls to mitigate the identified risks.
14	Project Approval Schedule 5, Clause 5	Implement a program of review, and where required revision, of strategies, plans and programs within 3 months of annual review, incident and audit.
15	Project Approval Schedule 5, Clause 10	Review procedures for updating the complaints register on a monthly basis
16	Statement of	Amend the Noise Management Plan to acknowledge that from

Reference No.	Clause	Recommendation
	Commitments Clause 4.2	a noise perspective with advice from the Noise Consultant that additional screening will not provide any benefits at the receptors.
17	Statement of Commitments Clause 4.6	Amend the Noise Management Plan to include noise mitigation measures for tracked dozers at night.
18	Statement of Commitments Clause 4.12	Manage noise from the site in accordance with the Noise Management Plan.
19	Statement of Commitments Clause 5.15	Review the bunding arrangements for IBCs and hydrocarbons against the requirements of the NSW EPA Secondary Containment Guidelines.
20	Statement of Commitments Clause 7.13	Modify soil stripping procedures to spray for weeds prior to stripping.
21	Statement of Commitments Clause 12.4	Amend the Blast Management Plan to state that “fragmented material is directed away from the Newell Highway”.
22	Statement of Commitments Clause 13.1	Review the need to develop a code of conduct for heavy vehicle drivers.
23	Statement of Commitments Clause 19.3	Amend the SOC to make the surface water monitoring requirements in the SOC consistent with the EPL.
24	EPL Clause M3.1	Review the Surface Water Monitoring Site Specific Procedure to ensure they are in accordance with the Approved Methods publication and reference this accordingly.

Appendices

Appendix A – Audit Checklist

Table 5 Project Approval Conditions – Schedule 2

Number	Condition	Compliance	Audit Findings
Schedule 2 – Administrative Conditions			
Obligation to minimise harm to the environment			
1	In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.	Partially Compliant	TGO have demonstrated the implementation of reasonable and feasible measures to manage the environmental impacts of the project, however there have still been incidents of environmental impact, particularly related to water management, dust and noise. These matters are discussed throughout the following tables.
Terms of approval			
2	The Proponent shall carry out the project generally in accordance with the:	Compliant	The extent of conformance to the statement of commitments, conditions of approval, EPL and mining lease has been outlined in the following tables.
	(a) EA;		
	(b) Statement of Commitments; and		
	(c) conditions of this approval.		
3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Not Applicable	
4	The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department’s assessment of:	Not Applicable	The DG has not specified any additional requirements for the project.
	(a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval; and		
	(b) the implementation of any actions or measures contained in these documents.		
5	The Proponent may carry out mining operations on the site until 31 December 2022.		

Number	Condition	Compliance	Audit Findings
Schedule 2 – Administrative Conditions			
	The Proponent shall not:		
	(a) process more than 1.5 million tonnes of ore at the site in a calendar year;	Compliant	A weightometer is used by the mill to monitor processing volumes. These are reported in the TGO Monthly Report, sighted December 2014 at audit, with mill throughput figures showing production for first six months was at 602,907 tonnes.
	(b) transport unprocessed ore from the site; or		Staff confirmed that no material is brought onto site.
	(c) process any ore other than that extracted from the site.		TGO smelt only gold produced on site. Residue from processing is disposed of in the Residue Storage Facility (RSF).
7	This approval does not permit the construction or operation of the Caloma Two Open Cut pit. Any future proposal to undertake the Caloma Two Open Cut pit shall be subject to further assessment and approval in accordance with the requirements of the EP&A Act.		Work has begun to inform this approval process for the Caloma Two Open Cut Pit. Initial contact has been made by TGO's consultant to the DP&E regarding their requirements for approval of the new pit. The location of the proposed new pit was sighted during the site inspection, and no construction work has begun in this area.
Structural adequacy			
8	The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. Note: Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.	Compliant	The Administration Building is currently being occupied by staff at TGO. Evidence of various inspections and conformance documents were supplied including a Narromine Shire Council (NSC) Construction Certificate from 6 September 2013 and Interim Occupation Certificate from 2 October 2013.
Demolition			
9	The Proponent shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	Not Verified	The original 'Wyoming' homestead on the property, which was removed during mine construction, was identified to have asbestos sheeting. No records have been maintained to determine whether the building was demolished in accordance with AS 2601-2001. It is noted that TGO provided an Asbestos Management Plan prepared by Regional Envirosciences Pty Ltd, Asbestos Removal

Number	Condition	Compliance	Audit Findings
Schedule 2 – Administrative Conditions			
			Clearance Certificate letter 7 October 2013 from P. Clifton and Associates Pty Ltd to Andrew Gibson at Central West Asbestos Removal and a waste receipt 8 October 2013 for the disposal of the asbestos material at the Commercial Disposal Depot.
Protection of public infrastructure			
10	<p>Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and</p> <p>(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p>	Compliant	<p>TGO commissioned a dilapidation report from GHD of the Newell Highway underpass one year after its construction. The contractor is now required to repair the identified defects.</p> <p>TGO were required to upgrade the Tomingley West Rd as part of the project approval. The completed road was sighted at audit.</p> <p>TGO relocated Telstra cable and power as part of site construction.</p>
11	<p>Unless otherwise agreed by RMS, all works associated with the underpass of the Newell Highway, all pipeline and transmission line crossings of classified roads, and all works connecting to classified roads shall be undertaken in accordance with the Works Authorisation Deed agreed between the Proponent and RMS and effective from 12 May 2011.</p>	Compliant	<p>TGO has attained a Notice of Practical Completion from RMS with minor omissions. A contract is in place to address the final omission.</p> <p>Sighted Alkane Resources Ltd and RTA NSW Tomingley Haul Rd Works Authorisation deed and Notice of Practical Completion 27 June 2014 from RMS that included a list of minor omissions and defects to be rectified. Sighted spreadsheet of Practical Completion Defects Timeline dated 14 August 2014.</p> <p>TGO personnel advised that the anti-gawking screens that were required as part of the defects identified by RMS are yet to be installed although temporary measures are in place until that occurs. The contract to construct and install the screens was awarded on 29 January 2015.</p>
Operation of plant and equipment			
12	<p>The Proponent shall ensure that all the plant and equipment used at the site, or to transport materials from the site, is:</p> <p>(a) maintained in a proper and efficient condition; and</p>	Compliant	<p>TGO have engaged Emeco to maintain/ repair/ service/ upgrade/ monitor plant and equipment. TGO conduct weekly meetings with</p>

Number	Condition	Compliance	Audit Findings
Schedule 2 – Administrative Conditions			
	(b) operated in a proper and efficient manner.		Emeco. Sighted 12 November 2014 Daily Production Summary Report from MIINT which included Equipment Performance statistics. Preventative Maintenance Servicing & Inspection spreadsheet for 777F Dump Truck which includes a number of checklists for safety reviews, scheduled services and inspections. Register of TGO site equipment maintained by Emeco. Register of Emeco service history for all TGO plant and equipment for 2014. Completed work orders WON885079 30 October 2014 and WON879502 24 June 2014.
Staged submission of any strategy, plan or program			
13	<p>With the approval of the Director-General, the Proponent may:</p> <p>(a) submit any strategy, plan or program required by this approval on a progressive basis; and</p> <p>(b) combine any strategy, plan or program required by this approval with any similar strategy, plan or program required for the project. Notes: While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the activities on site are covered by suitable strategies, plans or programs at all times; and</p> <p>(c) If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.</p>	Not Applicable	TGO has not progressively submitted strategies, plans or programs to DP&E for approval.
Planning agreement			
14	Within 2 months of the date of this approval, unless otherwise agreed by the Director-General, the Proponent shall enter into a planning agreement with Council in accordance with Division 6 of Part 4 of the EP&A Act, which provides for contributions to Council for:	Compliant	Sighted planning agreement with NSC, dated 7 May 2012. This is prior to the date of determination of the project approval 24 July 2012.

Number	Condition	Compliance	Audit Findings
Schedule 2 – Administrative Conditions			
	(a) upgrades and maintenance of Council's road infrastructure affected by the project; and	Compliant	The Tomingley West Road upgrade is complete. Sighted email from Mark Williams, TGO to Kerrie Murphy, NSC dated, 29 December 2014, requesting written confirmation regarding their satisfaction with the works. No response has been received.
	(b) general community enhancement to address social amenity and community infrastructure requirements arising from the project.	Compliant	TGO advertise two rounds of community grants per year, advertised in local newspapers. The Community fund panel, comprised of representatives from TGO and NSC review submissions and recommend projects to fund, which is endorsed by Council. TGO provides the funds which are paid through NSC. As evidence, TGO presented advertisement and meeting minutes from 15 April 2014 and 1 October 2014. TGO contributed \$119,242 to the local community during 2014.
	The contributions shall be consistent with the general terms of agreement between Council and Alkane Resources Ltd in Appendix 3.	Compliant	NSC confirmed via email on 29 April 2015 that payments have been received from TGO in accordance with the Voluntary Planning Agreement.

Table 6 Project Approval Conditions – Schedule 3

Number	Condition	Compliance	Audit Findings										
Schedule 3													
ENVIRONMENTAL PERFORMANCE CONDITIONS													
NOISE													
Acquisition Upon Request													
1	<p>Upon receiving a written request for acquisition from an owner of the land in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 6-7 of schedule 4.</p> <table border="1"> <caption>Table 1: Land subject to acquisition upon request</caption> <thead> <tr> <th>Lot</th> <th>DP</th> </tr> </thead> <tbody> <tr> <td>156</td> <td>755093</td> </tr> <tr> <td>157</td> <td>755093</td> </tr> <tr> <td>162</td> <td>755093</td> </tr> <tr> <td>173</td> <td>755093</td> </tr> </tbody> </table>	Lot	DP	156	755093	157	755093	162	755093	173	755093	Not Applicable	<p>TGO has not received a written request for acquisition from any of the properties listed in Table 1 and is therefore not applicable.</p> <p>TGO has proactively notified in writing (letter dated 20th August 2012) to the property owners listed that their property may be acquired by TGO, upon request by the owner of the land.</p>
Lot	DP												
156	755093												
157	755093												
162	755093												
173	755093												
Additional Noise Mitigation Measures													
2	<p>Upon receiving a written request from the owner of the properties identified as R3 or R29, the Proponent shall implement additional noise mitigation measures (such as double-glazing, insulation and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible, and directed towards reducing the noise impacts of the project on the residence.</p>	Not Applicable	<p>TGO has not received written request from R3 and R29 for the implementation of noise mitigation measures.</p> <p>TGO has however notified the current owner of R3 and R29 in writing (letter dated 21 August 2012) that acoustic treatments can be installed.</p> <p>TGO has treated two houses (Ellerslie and Lillyvale) based on advice from their acoustic consultant and during the audit the report titled 'Acoustic treatment to Residences Close to Mine Operations' by Noise and Sound Services (June 2014) was sighted. Acoustic treatments included windows and frames, air conditioning and maintenance.</p>										

Number	Condition	Compliance	Audit Findings																																																											
Schedule 3																																																														
	If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution. Note: to interpret the locations referred to in condition 2 of schedule 3, see the figure in Appendix 4;		TGO has not received any letters from the owners identified above regarding the installation of additional noise mitigation measures.																																																											
Noise Criteria																																																														
3	The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.	Partially Compliant	TGO are not meeting the noise criteria however they are in the process of entering into agreements with affected residents/landowners.																																																											
	<p>However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p> <p>Note: After the first review of any EPL granted for this project under section 78 of the POEO Act, nothing in this approval prevents the EPA from imposing stricter noise limits on the project under the EPL.</p>		<p>Noise compliance assessments are undertaken annually by noise specialist consultants (Noise and Sound Services). Noise exceedance due to mine activity has been identified at residence R3 and exceedances are also likely elsewhere within the town.</p> <p>In many cases the noise on the north western area of town is audible even though the noise levels comply at the noise monitoring station.</p> <p>Most mine noise would be subject to additional modifying factors for intermittent, impulsive or low frequency noise as per the Industrial Noise Policy. The Noise Compliance Report (April 2014) discusses modifying factors in the criteria section but does not appear to add these on, in the results section.</p> <p>Noise levels below the criteria can be cause for annoyance so TGO decided to adopt a proactive approach and apply acoustic treatments to houses in the village identified as being affected by mine noise.</p> <p>A MOU is in place between two residents and have plans to acoustically treat up to 14 houses in total. TGO will delay notification to the Department until they have an understanding with all impacted landowners in town.</p> <p>A copy of a signed MOU (2 September 2014) between TGO and Lillyvale</p>																																																											
	<p>Table 2: Noise Criteria dB(A)</p> <table border="1"> <thead> <tr> <th rowspan="2">Noise Assessment Group</th> <th rowspan="2">Receivers</th> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>(L_{Aeq}(15-minute))</th> <th>(L_{Aeq}(15-minute))</th> <th>(L_{Aeq}(15-minute))</th> <th>(L_{A1}(1-minute))</th> </tr> </thead> <tbody> <tr> <td rowspan="3">NAG A</td> <td>R1, R6</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> </tr> <tr> <td>R5</td> <td>37</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>All other receivers</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> <tr> <td>NAG B</td> <td>All receivers</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> </tr> <tr> <td rowspan="3">NAG C</td> <td>R3</td> <td>49</td> <td>38</td> <td>38</td> <td>45</td> </tr> <tr> <td>R29</td> <td>48</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td>All other receivers</td> <td>46</td> <td>37</td> <td>37</td> <td>45</td> </tr> <tr> <td rowspan="2">NAG D</td> <td>All receivers</td> <td>43</td> <td>38</td> <td>38</td> <td>46</td> </tr> <tr> <td>All other residential receivers</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> To interpret the locations referred to in Table 2, see the figure in Appendix 4; Noise generated by the project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy. 	Noise Assessment Group	Receivers	Day	Evening	Night		(L _{Aeq} (15-minute))	(L _{Aeq} (15-minute))	(L _{Aeq} (15-minute))	(L _{A1} (1-minute))	NAG A	R1, R6	36	36	36	45	R5	37	37	37	45	All other receivers	35	35	35	45	NAG B	All receivers	36	36	36	45	NAG C	R3	49	38	38	45	R29	48	37	37	45	All other receivers	46	37	37	45	NAG D	All receivers	43	38	38	46	All other residential receivers	35	35	35	45		
Noise Assessment Group	Receivers			Day	Evening	Night																																																								
		(L _{Aeq} (15-minute))	(L _{Aeq} (15-minute))	(L _{Aeq} (15-minute))	(L _{A1} (1-minute))																																																									
NAG A	R1, R6	36	36	36	45																																																									
	R5	37	37	37	45																																																									
	All other receivers	35	35	35	45																																																									
NAG B	All receivers	36	36	36	45																																																									
NAG C	R3	49	38	38	45																																																									
	R29	48	37	37	45																																																									
	All other receivers	46	37	37	45																																																									
NAG D	All receivers	43	38	38	46																																																									
	All other residential receivers	35	35	35	45																																																									

Number	Condition	Compliance	Audit Findings										
Schedule 3													
			<p>has been sighted during the audit.</p> <p>Recommendation 1: Inform Planning of the progress towards achieving agreement with the relevant owner of affected residences/land to generate higher noise levels</p>										
Operating Hours													
4	<p>The Proponent shall comply with the operating hours in Table 3.</p> <table border="1" data-bbox="286 743 958 954"> <caption>Table 3: Operating hours</caption> <thead> <tr> <th>Activity</th> <th>Operating Hours</th> </tr> </thead> <tbody> <tr> <td>Vegetation clearing and topsoil stripping</td> <td>6am-6pm, 7 days per week</td> </tr> <tr> <td>Construction</td> <td>24 hours, 7 days per week</td> </tr> <tr> <td>Mining, maintenance and processing operations</td> <td>24 hours, 7 days per week</td> </tr> <tr> <td>Rehabilitation</td> <td>7am-10pm, 7 days per week</td> </tr> </tbody> </table> <p><small>Note: Condition 8 includes restrictions on blasting times</small></p>	Activity	Operating Hours	Vegetation clearing and topsoil stripping	6am-6pm, 7 days per week	Construction	24 hours, 7 days per week	Mining, maintenance and processing operations	24 hours, 7 days per week	Rehabilitation	7am-10pm, 7 days per week	Compliant	<p>The operating hours for the site are incorporated into the Noise Management Plan.</p> <p>To date, only topsoil stripping has occurred and this was undertaken during the day shift in accordance with the criteria.</p> <p>Construction and mining, maintenance and processing are allowed 24 hours a day.</p>
Activity	Operating Hours												
Vegetation clearing and topsoil stripping	6am-6pm, 7 days per week												
Construction	24 hours, 7 days per week												
Mining, maintenance and processing operations	24 hours, 7 days per week												
Rehabilitation	7am-10pm, 7 days per week												
Operating Conditions													
5	<p>The Proponent shall:</p> <p>(a) implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational and traffic noise of the project;</p>	Compliant	<p>TGO have a Noise Management Plan for the site which outlines noise management measures to minimise potential noise impacts from site. Noise management measures include:</p> <ul style="list-style-type: none"> • Land acquisition • Property modification (additional noise mitigation) • Operating hours • Engineering controls • Procedural controls. <p>Best practice measures implemented onsite include the installation of</p>										

Number	Condition	Compliance	Audit Findings
Schedule 3			
			broadband reversing alarms on all vehicles, use of wheeled dozers (rather than tracked) on the waste rock emplacements during the night shift, and the use of earth noise bunds to ameliorate noise impacts.
	(b) operate a noise management system on site that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this approval;	Partially Compliant	<p>TGO has a real time noise management system operating at the site however this needs to be further refined in order to provide more effective noise management on site.</p> <p>A real time noise monitor is installed and data is reviewed and assessed by Noise and Sound Services as required to consider the contribution of mine activity to the overall noise. The real time noise logger is a B&K2250 and the contract date of the system was sighted during the audit to be 18/9/2012.</p> <p>TGO have had issues obtaining meaningful data from the real-time noise logger as it also captures noise from trucks and ambient noise from birds and insects. The noise consultant has used filters to exclude high frequency noise from birds and insects from datasets and also statistical noise intervals to exclude noise from trucks on the highway.</p> <p>Additional portable real time monitors have been used to gain more specific data from key areas of the village.</p> <p>TGO has recently signed up with Weatherzone for better forecasting that will eventually be incorporated with the site weather station. Temperature inversion is not currently monitored however noise complaints have triggered changes in fleet operation.</p> <p>Real time noise monitoring is observed not to be an effective tool to manage noise sources onsite due to other extraneous noise sources at the receptor locations and TGO has decided to be proactive and install acoustic treatments to all residents in town.</p> <p>Recommendation 2: Improve the ability for the real time weather system to predict when noise is likely to be an issue at receptors in town. This is to include wind speed and direction and the presence of a temperature inversion. It is recommended that TGO implement a formal process where the environmental manager (or other</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<i>responsible person) alerts the site management about the onset of a temperature inversion.</i>
	(c) investigate ways to minimise the noise generated by the project;	Compliant	<p>TGO has engaged specialist noise consultants to help manage and reduce noise from the site. Some of these approaches include the use of earth bunds, equipment modification, rostering of tasks and acoustic treatments to homes nearby.</p> <p>Some of these are listed in the Noise Management Plan for the site as well as reports from Noise and Sound Services and Hushpak engineering (Mobile machinery noise attenuation, September 2014)</p>
	(d) maintain the effectiveness of noise suppression equipment on plant at all times and ensure that defective plant is not used operationally until fully repaired;	Compliant	<p>Some noise suppression has been applied on tracked dozers, crusher and screens (refer Noise Management Plan). The effectiveness of these should be checked in the annual noise audit conducted onsite. Sound monitoring of equipment including trucks has begun to ensure noise from vehicles is not increasing and shall be used as a benchmark.</p> <p>TGO has check sheets for all equipment used onsite to help maintain and provide any required maintenance</p>
	(e) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply; and	Compliant	<p>Noise limits for project don't apply when wind speeds are greater than 3 m/s or greater than 2 m/s with an F class temperature inversion. Limits also don't apply when there is a G class inversion. Noise impacts will still potentially be audible during these conditions (they were during site attendance when wind speeds were over 5 m/s) meaning that TGO should seek to manage noise at all times.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(f) report on these investigations and the implementation and effectiveness of these measures in the Annual Review, to the satisfaction of the Director-General.	Not Applicable	Changes in noise impact on residential receivers to be analysed in the Annual Review. Final document for 2013-14 period has not yet been finalised and only encompasses approximately three months of operation. Current reporting period concludes in March 2015. Recommendation 3: TGO should investigate triggers in the real time noise monitoring system to enable them to undertake/schedule noisy events during these times.
Noise Management Plan			
6	The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. The plan must:	Compliant	TGO prepared a Noise Management Plan for the project which was approved by the Director General. Approval was sighted during the audit in an email from Kane Winwood (DP&E) to Collean Measday of TGO dated 17 June 2013.
	(a) be prepared in consultation with the EPA and Council, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;	Compliant	TGO consulted with the EPA and NSC in the preparation of the NMP. Evidence of consultation is included in Appendix 1 of the NMP.
	(b) describe the measures that would be implemented to ensure compliance with conditions 3-5 of this schedule; and	Compliant	The Noise Management Plan for the project outlines the criteria and operating times as well as noise management measures in order to meet these goals.
	(c) include a monitoring program that:		
	(i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project;	Compliant	A permanent real time noise monitor is installed and operating and is used in conjunction with attended noise monitoring by the specialist noise consultant (Noise and Sound Services). This was sighted in the audit and is shown in the annual Noise Compliant Report (October 2014).
	(ii) adequately supports the proactive and reactive noise management system on site;	Partially Compliant	As discussed above the real-time noise logger and weather station are limited in their effectiveness to proactively manage noise onsite. The noise monitoring program along with advice from the acoustic consultant manages noise reactively.

Number	Condition	Compliance	Audit Findings
Schedule 3			
			Refer to Recommendation 2.
	(iii) includes a protocol for determining exceedances of the relevant conditions of this approval;	Partially Compliant	Data from the noise monitoring program is reviewed by the noise consultant for the annual Noise Compliance Report as well as other targeted noise monitoring events. Everyday exceedances of the noise criteria are hard to determine due to extraneous noise sources influencing the measurement noise levels such as trucks and bird and insects. Refer to Recommendation 2.
	(iv) evaluates and reports on the effectiveness of the noise management system on site; and	Compliant	The Noise Management Plan provides a means for reviewing noise exceedances and determining the primary cause and how activities can be improved to prevent recurrence.
	(v) provides for the annual validation of the noise model for the project over the first 3 years following the commencement of mining operations.	Non Compliant	The Noise Management Plan does not make reference to a noise model. TGO has advised that the noise model for the site is yet to be completed based on the latest mining arrangement and equipment however has been commenced by Noise and Sound Services. Corrective Action 1: Update the noise model developed by SLR based on most recent mine survey and mining equipment locations. Model to be updated with any recent source sound measurements over a range of meteorological conditions.
BLASTING			
Blasting Criteria			

Number	Condition	Compliance	Audit Findings												
Schedule 3															
7	<p>The Proponent shall ensure that blasting on the site does not cause exceedances of the criteria in Table 4.</p> <table border="1"> <caption>Table 4: Blasting Criteria</caption> <thead> <tr> <th>Location</th> <th>Airblast Overpressure (dB(Lin Peak))</th> <th>Ground Vibration (mm/s)</th> <th>Allowable Exceedance</th> </tr> </thead> <tbody> <tr> <td>Residence on privately-owned land</td> <td>120 115</td> <td>10 5</td> <td>0% 5% of total blasts over any 12 month period</td> </tr> <tr> <td>All public infrastructure</td> <td>-</td> <td>50, or alternatively, a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS 2187.2-2006, or its latest version</td> <td>0%</td> </tr> </tbody> </table>	Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance	Residence on privately-owned land	120 115	10 5	0% 5% of total blasts over any 12 month period	All public infrastructure	-	50, or alternatively, a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS 2187.2-2006, or its latest version	0%	Compliant	<p>Blasting monitoring is summarised on the company webpage. There was one exceedance on 1 July 2014 and this was reported to EPA on 9 July 2014. The incident investigation (#732) was sighted during the audit.</p> <p>Since the exceedance TGO has implemented new approval process for blast plans that includes more levels of sign off. The new pre-blast checklist was observed during the audit which includes the shot crew, observers and blast guards. Four monitors recorded the impact.</p> <p>Vibration monitoring results during blasts commenced during June 2014. A review of all monthly records on the TGO webpage shows no non-compliances up until February 2015. TGO advised that a level of 5mm/s was exceeded on one occasion at the underpass.</p>
Location	Airblast Overpressure (dB(Lin Peak))	Ground Vibration (mm/s)	Allowable Exceedance												
Residence on privately-owned land	120 115	10 5	0% 5% of total blasts over any 12 month period												
All public infrastructure	-	50, or alternatively, a specific limit determined to the satisfaction of the Director-General by the structural design methodology in AS 2187.2-2006, or its latest version	0%												
	<p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner, and has advised the Department in writing of the terms of this agreement.</p>														
Blasting Hours															
8	<p>The Proponent shall only carry out blasting on site between 9:00am and 5:00pm Monday to Saturday, inclusive. No blasting is allowed on Sundays, public holidays or at any other time without the written approval of the Director-General.</p>	Compliant	<p>A review of blasting times during audit and on the TGO webpage showed that blasting was being undertaken after 9am and before 5pm. Blasting activity is available to the public on the Tomingley Gold webpage.</p>												
Blasting Frequency															

Number	Condition	Compliance	Audit Findings
Schedule 3			
9	<p>The Proponent may carry out a maximum of three blasts per day for mining operations on the site, unless an additional blast is required following a blast misfire. This condition does not apply to blasts that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or blasts required to ensure the safety of the site or its workers.</p> <p>Note: for the purpose of this condition, a blast refers to a single blast event, which may involve a number of individual blasts fired in quick succession in a discrete area of the site.</p>	Compliant	A review of the blasting summaries in the monthly monitoring reports shows that there is generally one blast a day. Days where there are multiple blasts show ground vibration of 0 mm/s and this is likely due to the occasional misfire reblast. Blasting activity is available to the public on the Tomingley Gold webpage.
Property Inspections			
10	The Proponent shall advise the owners of privately-owned land within 2 kilometres of blasting operations at least 2 months prior to blasting that they are entitled to a structural property inspection to establish the baseline condition of buildings and other structures on the property.	Compliant	TGO advised that there is a blasting notification board located in the village of Tomingley. Information about upcoming blasts is listed on this board however this was not sighted during the audit.
11	If the Proponent receives a written request from any such landowner, then within one month of receiving the request, and where possible prior to blasting, the Proponent shall:		Property surveys are only undertaken for landowners that request it. During the audit a property survey was sighted for 1 Burril Street (19th September 2013) and TGO have provided others.
	<p>(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:</p> <p>(i) establish the baseline condition of any buildings and other structures on the land, or update the previous property inspection report; and</p> <p>(ii) identify measures that should be implemented to minimise the potential blasting impacts of the project on these buildings and/ or structures; and</p>	Compliant	<p>Property surveys are undertaken by a suitably qualified, experienced company, Calore Civil.</p> <p>The baseline condition of all building inspected as requested by the landowners is as reported by Calore Civil.</p> <p>No additional measures needed, blasting to date show that the vibration levels comply with the criteria.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(b) give the landowner a copy of the new or updated property inspection report.	Not Verified	As with the property inspections, copies of any new or updated reports are only supplied if requested by a landowner. This was not verified during the audit. There have not been any disputes over who undertakes the inspections.
	If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the property inspection report, either party may refer the matter to the Director-General for resolution.		
Property Investigations			
12	If the owner of any privately-owned land claims that buildings and/ or structures on his/ her land have been damaged as a result of blasting on the site, then within one month of receiving this claim the Proponent shall:	Compliant	TGO received a verbal complaint regarding property damage which was entered into the Community Enquiry Database (sighted entry from 1 July 2014). TGO provided a copy of the independent assessment undertaken by Calare Civil (Report on Cause of Cracking to Residence – 5 Merilba St Tomingley dated 20 August 2014) which concluded that the damage to the property was not a result of mining activity. TGO advised that the complainant was not satisfied with the outcome of the assessment and were advised that they could contact the DP&E. Sighted email from Mark Williams, TGO to Kane Winwood, DP&E notifying them of the situation. TGO have not received any further correspondence from DP&E.
	(a) commission a suitably qualified, experienced and independent person, whose appointment is acceptable to both parties to:		
	(b) give the landowner a copy of the property investigation report.		
	If this independent property investigation confirms the landowner's claim, and both parties agree with these findings, then the Proponent shall repair the damage to the satisfaction of the Director-General.		
	If there is a dispute over the selection of the suitably qualified, experienced and independent person, or the Proponent or the landowner disagrees with the findings of the independent property investigation, either party may refer the matter to the Director-General for resolution.		
Operating Conditions			
13	During operation of the project, the Proponent shall:		

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(a) implement best management practice to: <ul style="list-style-type: none"> (i) protect the safety of people and livestock in the surrounding area; (ii) protect public or private infrastructure/ property in the surrounding area from any damage, including the Newell Highway; and (iii) minimise the dust and fume emissions from any blasting; 	Compliant	TGO have installed signs and coded access gates. Traffic control during blasts as required. TGO notify RMS 24 hours before each blast and there has been no issues with infrastructure or vehicles on the highway Dust from blasting is managed in accordance with the Dust Management Plan.
	(b) minimise the frequency and duration of any road closures, and avoid road closures during peak traffic periods; and	Compliant	TGO advised that RMS are impressed with lack of traffic disruption to date. Approval has been gained from RMS not to close the road for certain blasts.
	(c) operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, to the satisfaction of the Director-General.	Compliant	Signs in truck stops indicate general times during which blasting may occur however there is no exact schedule available.
Blast Management Plan			
14	The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:		TGO have prepared a Blast Management Plan for the project.
	(a) be prepared in consultation with OEH, RMS and Council, and submitted to the Director-General for approval prior to undertaking any blasting in conjunction with mining operations on-site;	Partially Compliant	TGO's consultation with relevant authorities is included in Appendix 1 of the Blast Management Plan. TGO personnel advised that it has not been submitted to the DG for approval. Recommendation 4: Obtain DG approval for the Blast Management Plan.
	(b) describe the blast mitigation measures that would be implemented to ensure compliance with conditions 7-13 of this schedule; and	Compliant	Blast mitigation measures are provided in the Blast Management Plan. Blast design and blast checklists were sighted, including the new checklist

Number	Condition	Compliance	Audit Findings
Schedule 3			
			developed after the one exceedance.
	(c) include a blast monitoring program to evaluate the performance of the project.	Compliant	TGO undertake air blast overpressure and ground vibration monitoring at four locations, two onsite and two at the nearest receptors. The monitoring is an automated system that sends alerts based on trigger levels. Data is published in the monthly environmental reports.
AIR QUALITY AND GREENHOUSE GAS			
Odour			
15	The Proponent shall ensure that no offensive odours, as defined under the POEO Act, are emitted from the site.	Compliant	Odour from the site is not an issue. There are no significant odour sources and no odour complaints have been made at the site.
Greenhouse Gas Emissions			
16	The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.	Compliant	TGO have appropriate mitigation measures outlined in the AQGGMP. NPI and NGRS reporting was completed for 2014. CO2 emissions were reported to be below the threshold.
Air Quality Criteria			

Number	Condition	Compliance	Audit Findings																							
Schedule 3																										
17	<p>The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 5, 6 or 7 at any residence on privately-owned land or on more than 25 percent of any privately owned land.</p> <p><i>Table 5: Long term impact assessment criteria for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Total suspended particulate (TSP) matter</td> <td>Annual</td> <td>^a 90 µg/m³</td> </tr> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>Annual</td> <td>^a 30 µg/m³</td> </tr> </tbody> </table> <p><i>Table 6: Short term impact assessment criterion for particulate matter</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>^d Criterion</th> </tr> </thead> <tbody> <tr> <td>Particulate matter < 10 µm (PM₁₀)</td> <td>24 hour</td> <td>^a 50 µg/m³</td> </tr> </tbody> </table> <p><i>Table 7: Long term impact assessment criteria for deposited dust</i></p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Averaging Period</th> <th>Maximum increase in deposited dust level</th> <th>Maximum total deposited dust level</th> </tr> </thead> <tbody> <tr> <td>^c Deposited dust</td> <td>Annual</td> <td>^b 2 g/m²/month</td> <td>^{a, d} 4 g/m²/month</td> </tr> </tbody> </table> <p><i>Notes to Tables 5-7:</i></p> <ul style="list-style-type: none"> ^a Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to all other sources); ^b Incremental impact (ie incremental increase in concentrations due to the project on its own); ^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General. 	Pollutant	Averaging Period	^d Criterion	Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging Period	^d Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^b 2 g/m ² /month	^{a, d} 4 g/m ² /month	Non Compliant	<p>Ongoing air quality monitoring is undertaken at the nearest sensitive receptor to the north of the site. PM₁₀ is measured using a TEOM and is linked real time to the site office. Up until 22 October 2014 there were no exceedances of the PM₁₀ 24 hour criteria however there has been multiple instances since then where the levels have exceeded the criteria. These are yet to be reported to the EPA.</p> <p>During the audit there was excessive dust due to high wind conditions blowing towards the nearest receptors. Mining vehicles continued to operate on the waste rock dump and elsewhere onsite even though the recorded dust levels that day were already exceeding the PM₁₀ criteria. When observed in the site office the PM₁₀ 24 hour levels were 100 µg/m³ and rising.</p> <p>It was observed that during the audit no measures were being undertaken to scale back operations to reduce dust impacts offsite.</p> <p>Corrective Action 2: Implement the controls in the Dust SSP to prevent exceedances of the dust criteria. It is recommended that TGO implement a formal process where the environmental manager (or other responsible person) alerts the site management about dust levels approaching the daily criteria.</p>
Pollutant	Averaging Period	^d Criterion																								
Total suspended particulate (TSP) matter	Annual	^a 90 µg/m ³																								
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³																								
Pollutant	Averaging Period	^d Criterion																								
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³																								
Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level																							
^c Deposited dust	Annual	^b 2 g/m ² /month	^{a, d} 4 g/m ² /month																							
Operating Conditions																										
18	The Proponent shall:																									
	(a) implement best management practice, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions from the project;	Non Compliant	<p>TGO has an Air Quality Management Plan and a Dust SSP for the project. These documents include measures for dust (particulate matter) during construction and operation. The plan also includes a response plan with proactive management and planning for adverse weather.</p> <p>During the audit the 24 Hr PM₁₀ dust levels were exceeding the criteria and no response was occurring. TGO has the technology in place to alert when limits are approaching but have not incorporated these into everyday site management.</p> <p>Best management would be to increase the watering of main haul roads, reduce or stop work on waste rock dumps closest to receptors and stop</p>																							

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<p>work entirely when high speed winds are blowing directly towards the receptors. None of these measures were implemented during the audit.</p> <p>The Dust SSP states that for winds greater than 32 km/hr that work in both the Caloma and Wyoming areas should be rescheduled.</p> <p>Refer to Corrective Action 2</p>
	(b) regularly assess the predictive meteorological forecasting data and real-time air quality monitoring data, and relocate, modify and/or stop operations on site to ensure compliance with the relevant conditions of this approval;	Partially Compliant.	<p>Real time and predictive meteorological data and forecasting is in place for the site and is outlined in the DUST SSP.</p> <p>The use of this data to control work practices is not being undertaken and this was observed during the audit.</p> <p>Refer to Corrective Action 2</p>
	(c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see Note d to Tables 5-7);	Non Compliant.	<p>The Dust Management Plan includes response plan however this is not being implemented onsite. There needs to be a commitment from TGO to scale back works under certain meteorological conditions. For example when strong winds are blowing directly towards the nearest receptors and the PM₁₀ levels are approaching the 24 hour criteria.</p> <p>Refer to Corrective Action 2</p>
	(d) minimise any visible air pollution generated by the project; and	Compliant	The Dust Management Plan provides control measures to limit visible dust leaving the site.
	(e) take all practical measures to minimise dust emissions from the residue storage facility, to the satisfaction of the Director-General.	Compliant	The Dust Management Plan applies to the entire project site. The Air Quality Management Plan contains a section on the residue storage facility. Dust from this area will likely not be a significant issue unless there is increased vehicle activity or in very high winds. If dust is an issue dust suppression agents can be applied.
Air Quality and Greenhouse Gas Management Plan			

Number	Condition	Compliance	Audit Findings
Schedule 3			
19	The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:	Compliant	TGO has prepared an Air Quality and Greenhouse Gas Management Plan (AQGGMP) for the project. Approval was sighted during the audit in an email from Kane Winwood (DP&E) to Collean Measday of TGO dated 17 June 2013.
	(a) be prepared in consultation with the EPA and Council, and be submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;	Compliant	Consultation for the AQGGMP is included in Appendix 1 of the plan.
	(b) describe the measures that would be implemented to ensure compliance with conditions 15-18 of this schedule; (c) include a program for the implementation of the measures referred to in (b) above;	Partially Compliant	TGO undertake some measures as documented in the AQGGMP and the Dust SSP to ensure compliance with the criteria. The main issue however is TGO is not taking appropriate actions to control dust impacts, even when levels are exceeding. Refer to Corrective Action 2
	(d) include an air quality monitoring program that:		
	(i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project;	Compliant	Dust monitoring is undertaken for the project using a real-time TEOM for PM ₁₀ , a high volume air sampler (HVAS) for TSP and five dust deposition gauges (DDG) for dust deposition. The TEOM and HVAS are located at the nearest sensitive receptors to the site and the DDGs are located at various locations. Air quality monitoring equipment is sufficient to evaluate performance of the project.
	(ii) adequately supports the proactive and reactive air quality management system on site; and	Compliant	The air quality monitoring program is sufficient to support both proactive and reactive management onsite.
	(iii) includes a protocol for determining exceedances of the relevant conditions of this approval; and	Partially Compliant	The real time TEOM is appropriate to determine daily exceedances of the PM ₁₀ dust criteria. There is however no automated text system in place to notify management that the limit is close to or is being exceeded. Determining exceedances is currently a reactive process.

Number	Condition	Compliance	Audit Findings
Schedule 3			
			Sight complaints register and responses to complaints. Sighted reported complaints in Community Enquiry Database. Responses to dust complaints were to contact the complainant and arrange to meet and discuss the impact on the complainant. Refer to Corrective Action 2
	(e) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site.	Compliant	TGO undertake annual NGERs reporting for the project. This will provide a benchmark to document greenhouse emissions and determine where key contributors are that may be able to be reduced. The 2014 NGERs report was sighted during the audit.
METEOROLOGICAL MONITORING			
20	For the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:		
	(a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and	Compliant	Carbon Based Environment are the maintenance contractor for TGO's TEOM, HVAS, DDGs and the weather station. During the audit the TGO Weather Station Field Check 17 Feb 2015 was sighted which states that the met station meets the requirements of the Approved Methods for Sampling of Air Pollutants in NSW. Annual meteorological station calibration is undertaken by Carbon Based Environmental and was sighted during the audit.
	(b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Director-General following consultation with the EPA.	Partially Compliant	In order to calculate the temperature lapse rate TGO would need to measure temperature at 10 m high (which they do) however another meteorological station would be needed that is 50 high which is not practical for a site such as this. The Industrial Noise Policy (INP) does allow alternative methods of calculation using data such as the sigma theta (wind deviation) which would be more appropriate for the site. TGO confirmed that the weather station measures wind deviation sigma

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<p>theta.</p> <p>Recommendation 5: Seek approval from the DG following consultation with the EPA, regarding whether the TGO weather station is a suitable alternative for continuous real time temperature lapse rate.</p>
SOIL AND WATER			
	<p>Note: Under the Water Act 1912 and/ or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project.</p>		<p>TGO has obtained the necessary water licences for the project. Sighted WAL20270 for the raw water pipeline which shows 1000ML/yr entitlement. This is the only water licence for the mine site.</p>
Water Supply			
21	<p>The Proponent shall ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Director-General.</p>	Compliant	<p>TGO have experienced water shortages since commencement of mining operations, impacting on dust suppression and process water requirements. The site has however not run out of water at any time since commencement of construction.</p> <p>TGO have reduced tonnage of production when water is limited. TGO Monthly Report January 2015_final, Section 6.5 references impacts of water availability on production throughput.</p> <p>There is currently no information in the draft WMP relating to this. Refer to Clause 32(a).</p> <p>Refer to Corrective Action 5</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
22	With the exception of potable water sourced to supply domestic consumption needs on the site, the Proponent shall preferentially employ water harvested from the site or generated through mine dewatering in place of potable water sourced from off-site.	Compliant	<p>TGO preferentially employ water harvested on site from sediment basins, RSF decant, groundwater intercepted in pits, as process water.</p> <p>However due to water shortages, water for the operation is supplemented from an off-site groundwater bore on the property 'Woodlands' near Narromine and transported to site through a 46km pipeline. This bore has an entitlement for 1000ML/year.</p> <p>These measures are not documented in the WMP. Refer to Clause 32(a).</p>
Water Discharges			
23	<p>The Proponent shall ensure that all surface water discharges from the site comply with:</p> <p>(a) section 120 of the POEO Act; or</p> <p>(b) the discharge limits (both volume and quality) set for the project in any applicable EPL.</p>	Not Verified	<p>Since commencement of operations in January 2014, two incidents have occurred that may constitute breaches of the POEO Act and EPL 20169:</p> <ul style="list-style-type: none"> • Discharge of rainfall runoff through an unlicensed discharge point on 1, 7, 24, 26, 28 March and 4, 11 April 2014; • Discharge of dirty water from Sediment Basin 2 through an unlicensed discharge point on 1 June 2014. <p>On both occasions, TGO followed the reporting protocol outlined in EPL 20169.</p> <p>Sighted written report 17 March 2014 from Mark Williams, TGO to Brad Tanswell, EPA.</p> <p>Sighted email confirmation of phone notification 2 June 2014, prevention notice from Brad Tanswell, EPA to Mark Williams, TGO 19 June 2014, and clean up notice from Brad Tanswell, EPA to Mark Williams, TGO 14 September 2014, letter from Mark Williams, TGO to Brad Tanswell, EPA 22 December re: notice to provide information and/or records.</p> <p><i>This matter is currently subject to legal proceedings with the EPA, and as such the audit will not provide any further findings.</i></p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
24	The concentration of Weak Acid Dissociable (WAD) cyanide in tailings discharged from the discharge point to the residue storage facility shall not exceed 20 mg/L (90th percentile) or 30 mg/ L (maximum).	Compliant	Daily production reports indicate that WAD concentration limits in the tailings discharged from the discharge point to the residue storage facility have not been exceeded. Sighted daily production reports for 3 March 2015, 21 November 2014 and 11 July 2014 that all included monitoring results for WAD cyanide in tailings. Sighted TGO WAD CN data.xlsx, maximum concentration 29.095mg/L, results indicate well below 20mg/L 90th percentile.
Drainage and Flooding			
25	The Proponent shall ensure that surface water diversion structures constructed as part of the project do not increase the frequency of flooding on the Newell Highway.	Non Compliant	Site personnel were not aware of any assessments that had been undertaken to verify that surface water diversion structures constructed as part of the project do not increase the frequency of flooding on the Newell Highway Site personnel advise that this assessment is proposed to be conducted as part of the preparation of the WMP. Corrective Action 3: Conduct a flood study to determine the impact of surface water diversion structures constructed as part of the project on flooding frequency on the Newell Highway.
Compensatory Water Supply			
26	The Proponent shall provide a compensatory water supply to any owner on privately-owned land whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the project, in consultation with NOW, and to the satisfaction of the Director-General.	Not Applicable	This clause has not been triggered. TGO is not aware of any owner on privately-owned land whose water entitlements have been adversely impacted.
Design and Permeability of Storages			

Number	Condition	Compliance	Audit Findings
Schedule 3			
27	<p>The Proponent shall ensure that the capacity of the residue storage facility and associated collection pond is designed to meet the requirements of the Environmental Guidelines – Management of Tailing Storage Facilities (Vic DPI, 2004) and that the floor and walls are lined to achieve a permeability standard of at least 1×10^{-9} m/s.</p> <p>Note: An alternative permeability standard may be acceptable following completion of an appropriate risk assessment undertaken in accordance with the abovementioned guidelines, to the satisfaction of the EPA and the Director-General.</p>	Non Compliant	<p>TGO advised that the RSF design report was lodged with the Dam Safety Committee for approval . A letter from the DSC on 3 November 2011 confirmed that the overall design satisfied the DSC requirements. The DSC letter advised that its requirements are primarily concerned with flood security level and structural stability.</p> <p>Monitoring of the construction of the dam was undertaken by Macquarie Geotech whom were engaged to inform the selection of soil for the construction of the RSF and to conduct testing throughout the construction process. (Sighted Level 1 Geotechnical Inspection and Testing for Residue Storage Facility, Tomingley Gold Project Report August 2013) The Macquarie Geotech report concluded that the earthworks were constructed in accordance with design specifications.</p> <p>From a permeability perspective however, the report did not explicitly state that the floor and walls are lined to achieve a permeability standard of at least 1×10^{-9} m/s.</p> <p>The auditor sought further clarification from TGO on this matter and TGO sought advice from Macquarie Geotech on the design specifications. Macquarie Geotech advised that a specification alternate to the requirements of Project Approval was attained.</p> <p>Corrective Action 4 : Undertake a risk assessment in accordance with Environmental Guidelines – Management of Tailing Storage Facilities (Vic DPI, 2004) to determine whether the permeability standard achieved for the residue storage facility and associated collection pond is acceptable.</p>
28	<p>The residue storage facility shall be maintained to ensure a minimum freeboard of 500 millimetres at all times.</p>	Compliant	<p>At the time of the inspection, the eastern pond was decommissioned in preparation for a wall lift and the western pond was operational. An average freeboard of over 500mm was observed on both ponds.</p> <p>Freeboard monitoring is documented in TGO RSF Operation Manual prepared by DE Cooper & Associates, and monitored via inspections.</p> <p>Sighted Residue Storage Facility Inspection Site Specific Procedure (shift inspections) and RSF Weekly Inspection Site Specific Procedure, and</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<p>RSF Inspection Checksheets for each shift 3 March 2015 4.30pm and 18 November 2014 7.30pm and 27 July 2014.</p> <p>Staff undertake a visual assessment of the freeboard not physical measurement. On the job training for shift supervisors is conducted regarding adequate assessment of freeboard following completion of the Reagents, Elution and Services training, sighted Reagents, Elution & Services Training Manual.</p>
29	The Proponent shall ensure that the floors and the walls of all water storages on site that receive chemical or salt laden water, including the dewatering ponds, raw water dams and process water dams are lined to achieve a permeability standard of at least 1×10^{-9} m/s.	Compliant	Saline groundwater, dewatered from the open cut pit, is discharged to the Process Water Dam. The process water and raw water dams are HDPE lined and exceed the permeability standard. At the time of the inspection, the Raw Water Dam and Process Water Dam were observed to be HDPE lined. .
30	The process water and raw water dams shall be maintained to ensure a minimum freeboard of 200 millimetres at all times.	Compliant	<p>Extensive controls are in place for the Process Water Dam including:</p> <ul style="list-style-type: none"> • HAZOP assessment conducted as part of WMP (not sighted) • level sensor is connected to process control room to allow monitoring in real time • a backup alarm that is a standalone, floating ball alarm with an audible alarm and flashing light. <p>The level sensors are set to 500mm which exceeds the requirements of Clause 30 but is required to satisfy EPL20169.</p> <p>The TGO spill control and water level sensors on the Process Water and Raw Water dams were sighted during the site inspection.</p>
Baseline Groundwater Monitoring			
31	The Proponent shall obtain at least 6 months of additional baseline groundwater monitoring within 12 months of the project approval. This monitoring shall:	Compliant	<p>The baseline groundwater monitoring program is described in the draft WMP and results were provided.</p> <p>Water_Monitoring_TGO_R1.xlsx was sighted at the audit that includes six months of baseline groundwater data.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(a) be sourced from bores WYMB02, WYMB03, WYMB04, WYMB06 (as shown in Figure 4.19 of the EA), and a new bore in the Gundong Creek alluvium to be established in consultation with NOW; and	Compliant	These bores are included in WMP monitoring program and the data was sighted in spreadsheet referenced above.
	(b) include a minimum of monthly measurements of standing water level and water quality parameters consistent with those monitored in the EA.	Partially Compliant	SWL and WQ parameters are monitored monthly as demonstrated by a review of the abovementioned monitoring data. It was noted that there were gaps in the dataset for most locations across at least one parameter. Recommendation 6: Ensure that all parameters required to be monitored as part of Clause 31 are included in the monitoring program and assessed during each monitoring event.
Water Management Plan			
32	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General.</p> <p>This plan must be prepared in consultation with the EPA and NOW, by a suitably qualified and experienced person(s) whose appointment has been approved by the Director-General, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise.</p>	Non Compliant	<p>TGO does not have a current WMP approved by the DG.</p> <p>TGO prepared a WMP and submitted it to the DP&E on 18 July 2013. The WMP was not approved as it did not include six months of baseline groundwater monitoring data. Sighted correspondence from Elle Donnelley, DP&E, 23 July 2013.</p> <p>Site personnel advise that the six months of baseline groundwater monitoring data has now been collected. However the WMP has not been resubmitted as the water balance components of the plan are being updated.</p> <p>In relation to other elements of this clause:</p> <ul style="list-style-type: none"> TGO consulted with NOW and the EPA during preparation of the WMP as evidenced by correspondence included in Appendix 2 of the WMP Evidence of DP&E approval of the Groundwater consultant is provided in Appendix 1 of the WMP, TGO sought approval of the surface water consultant from DP&E however no documentation was available to verify approval from the DP&E. (Sighted letter from Mark Williams TGO to Kane Winwood at DP&E on 5 May 2014 re: appointment of consultant to prepare WMP. TGO did not receive a response).

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<ul style="list-style-type: none"> The plan was not submitted to the DG for approval by the end of January 2013, as required by the clause. <p>Corrective Action 5: Finalise Water Management Plan to address ensuring sufficient water for operations, water harvesting, flooding risk, water balance, surface and groundwater management plans addressing all of the requirements of Clause 32 (b) and (c), and submit it to DP&E for approval.</p>
	<p>In addition to the standard requirements for management plans (see Condition 3 of Schedule 5), this plan must include:</p> <p>(a) a Site Water Balance that:</p> <p>(i) includes details of:</p> <ul style="list-style-type: none"> sources and security of water supply; water use on site; water management on site; off-site water discharges, including volume, timing and release point infrastructure requirements; reporting procedures, including comparisons of the site water balance for each calendar year; and <p>(ii) describe what measures would be implemented to minimise potable water use on site;</p>	Partially Compliant	<p>A site water balance was prepared as part of the initial WMP version R4 and was included in Section 4 of the WMP:</p> <ul style="list-style-type: none"> A description of sources of water for the site is included in Section 4.2 and security of supply discussed in Section 4.7. The WMP assumed that peak demand would never exceed the licenced extraction volume from the raw water pipeline of 1000 ML/yr however operations require greater than 1000 ML/yr. Estimates of water demands are included in Section 4.3 of the WMP. Operations at site to date have indicated that this significantly underestimates dust suppression volumes and process water demand. Water management for the onsite storages is described in Section 4.8. Section 8.4.4-8.4.6 include triggers, actions and response plans for onsite storages. Criteria for the release of water offsite from sediment basins are covered in Section 8.2. Reporting procedures are covered in Section 6.4 including that results are to be reviewed within three days of receipt from the laboratory and that results are to be reported in the Monthly Environmental Monitoring Report. Section 8.3 includes triggers for further investigation of water quality results and the procedure for reporting to the EPA. <p>However, the plan does not:</p> <ul style="list-style-type: none"> compare site water balance annually discuss measures to minimise potable water use on site discuss water harvesting on site. <p>Refer to Corrective Action 5</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	<p>(b) a Surface Water Management Plan that includes:</p> <p>(i) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could be affected by the project (including Gundong Creek);</p> <p>(ii) a detailed description of the water management system on site, including:</p> <ul style="list-style-type: none"> • clean water diversion systems; • erosion and sediment controls; and • water storages; <p>(iii) detailed plans, including design objectives and performance criteria, for:</p> <ul style="list-style-type: none"> • design and management of the final voids; • design and management of water storages including the residue storage facility and process water dams; and • control of any potential water pollution from the rehabilitated areas of the site; <p>(iv) a program to monitor:</p> <ul style="list-style-type: none"> • the effectiveness of the water management system; • potential leakage or spillage from on-site pipelines • surface water flows and quality, stream health and channel stability in Gundong Creek (in so far as it could potentially be affected by the project); <p>(v) a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and</p> <p>(vi) reporting procedures for the results of the monitoring program; and</p>	Partially Compliant	<p>The current WMP addresses the majority of the requirements of Clause 32 (b) as follows:</p> <ul style="list-style-type: none"> • The ephemeral nature of Gundong Creek has limited the baseline data that has been able to be collected on water quality and flows. Results from a flow event in 2010 are included in the WMP Section 6.5. • The water management system is described in Section 4.8 (water storages) and Section 5 and Appendix 3 (Erosion and Sediment Control Plans) <i>however clean water diversion systems are not discussed in the WMP.</i> • Limited information is included in the WMP regarding detailed plans of water management infrastructure. Final voids are yet to be designed, the MOP requires the preparation of a closure plan closer to planned closure. RSF general arrangement and design details are included in Appendix 5 <i>however no design information is included for the Process Water Dam. The WMP does not address controlling pollution from rehabilitated areas of the site.</i> • The monitoring program is outlined in Section 6 of the WMP includes limited information on TGO's channel stability monitoring in Gundong Creek <i>however it does not address the effectiveness of the water management system nor potential leaks/spills from onsite pipelines.</i> Staff indicated that inspections of water management structures are undertaken following significant rainfall events. Sighted evidence of completed inspection checklists. Channel stability monitoring commenced in December 2014. Sighted Workplace Inspection (Waterways and Erosion) 24 December 2014. Sighted photos at photo point Creek 1 from 2013 and 2015. • Plans to respond to exceedances of water quality criteria are included in Section 8.3 including triggers for further investigation and reporting requirements. TGO use a system called C-Safe to manage safety, hazards and risks (includes environmental records). Sighted incident 6 January 2015 for dirty water discharge, includes actions, closed out. Outstanding and high risk items are tracked by Safety Manager through C-Safe. Environmental incidents are reported through Monthly Environmental Report. TGO also utilise a system called MIINT for shift summaries, this tracks environmental incidents/actions. <p>Section 6.3 and 6.4 of the WMP outlines water quality monitoring and reporting requirements. TGO are required to monitor water quality parameters when sediment ponds are discharging or Gundong Creek is flowing. Gundong Creek hasn't flowed since operations commenced. Only one sediment pond has discharged since 2014, these results are</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	<p>(c) a Groundwater Management Plan, that includes:</p> <p>(i) detailed baseline data on groundwater levels, yield and quality in the region, and privately owned groundwater bores, that could be affected by the project;</p> <p>(ii) groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</p> <p>(iii) a program to monitor:</p> <ul style="list-style-type: none"> • groundwater inflows to the open cut and underground mining operations; • the impacts of the project on: - alluvial aquifers; and any groundwater bores on privately-owned land that could be affected by the project; • the seepage/leachate from the residue storage facility, water storages, backfilled voids and the final void; and • the quality of groundwater to be re-used on the site; <p>(iv) a program for the on-going verification and refinement of the groundwater model, including the review and incorporation of additional baseline data obtained in accordance with condition 31, within 12 months of the project approval; and</p> <p>(v) a plan to respond to any exceedances of the groundwater assessment criteria.</p>	Non-Compliant	<p>TGO previously submitted WMP version R4 to the DP&E but was rejected based on the lack of baseline groundwater data (refer above) which meant that the WMP also lacked groundwater assessment criteria, groundwater model and plans for responding to exceedances of groundwater criteria.</p> <p>Baseline groundwater monitoring has since been undertaken – sighted results from November 2012 to May 2013 that included monitoring piezometers on the TGO site as well as one on privately owned land ‘Orchard GW037395’, however the monitoring did not include yield.</p> <p>TGO have developed and are implementing a groundwater monitoring program that complies with the EPL. TGO utilise a contractor, Carbon Based Environmental, to undertake groundwater monitoring. Sighted monitoring procedure in Carbon Based Environmental’s proposal to TGO.</p> <p>To monitor inflows to the open cut mining operations, TGO have installed a flow meter on the pump that pumps to the water cart to measure the volume of dewatering from the pit. Sighted Mining Water Usage V5 spreadsheet that includes start and finish pumping volumes. This indicated that the first pumping occurred on 15 March 2015.</p> <p>Refer to Corrective Action 5</p>
BIODIVERSITY			
Biodiversity Offset			

Number	Condition	Compliance	Audit Findings
--------	-----------	------------	----------------

Schedule 3

33	The Proponent shall implement the offset strategy outlined in Table 8, and shown in Appendix 5, to the satisfaction of the Director-General.	Partially Compliant	<p>TGO was in the process of implementing this requirement however it is noted that the areas nominated in table 8 have been modified following negotiations with TGO subsequent to the project approval.</p> <p>Since receipt of the project approval, there have been extensive negotiations between Local Land Services (LLS) and TGO regarding the offset areas in the Property Vegetation Plan (PVP) being developed to protect and manage the offset areas at the mine site. This has resulted in a change to the offset strategy in Table 8, which requires TGO to seek an addendum to Table 8 in order for it to comply with this requirement and its agreement with the LLS.</p> <p>Sighted letter from 21 November 2014 from Addy Watson, TGO to Tim Nalder, LLS re: changes agreed with OEH. LLS approved PVP on 10 February 2015 as sighted in email from Tim Nalder, LLS to Mark Williams, TGO. Meeting with OEH 17 September 2014 re: changes to biodiversity offsets.</p> <p>Recommendation 7: TGO to seek a change in biodiversity offset areas in the Project Approval to make it consistent with the areas approved by Local Land Services.</p>
----	--	---------------------	--

Table 8: Biodiversity Offset

Community Type	Offset Area to be Conserved (ha)	Remnant Extension (Protection and Ameliorative Planting) (ha)
Inland Grey Box – Poplar Box – White Cypress Pine tall woodland on red loams (Benson 76)	21.1	21.5
River Red Gum riverine woodland forest (Benson 78)	13.1	13.5
Fuzzy Box – Inland Grey Box on alluvial brown loam soils (Benson 201)	5.0	26.0
Poplar Box – Belah woodland on clay alluvial plains (Benson 56)	1.9	0
Belah/ Black Oak Western Rosewood, Wilga Community (Benson 57)	25.5	0
TOTAL	66.6	61.0

Community Type	Vegetation community areas specified in Project Approval			Vegetation community areas as per draft PVP			Vegetation community areas as per Modified Offset Strategy		
	Remnant Conserved	Re-vegetation	Total conserved	Remnant Conserved	Re-vegetation	Total conserved	Remnant Conserved	Re-vegetation	Total conserved
1. Inland Grey Box (Benson 76)	21.1	21.5	42.6	26.48	19.16	45.64	26.6	28.8	55.4
2. Fuzzy Box (Benson 201)	5.0	26.0	31.0	16.02	25.20	41.22	14.5	26.3	40.8

Table 1: Proposed changes in Offset Areas. All units are hectares.

Number	Condition	Compliance	Audit Findings
Schedule 3			
34	By 31 January 2015, the Proponent shall make suitable arrangements to provide appropriate long-term security for the Offset Area in the strategy to the satisfaction of the Director-General.	Compliant	See audit findings for Clause 33.
Pre-Clearing Surveys			
35	Prior to and during vegetation clearing, the Proponent shall engage a suitably qualified and/or experienced ecologist to confirm the presence of nesting/roosting species in areas to be affected by clearing activities.	Compliant	<p>Protocols for pre and post clearing surveys were developed as part of the preparation of the Biodiversity Management Plan (BMP). This protocol is outlined in Section 8.1.</p> <p>Surveys are conducted by TGO environmental personnel (sighted CVs for Addy Watson, John Shipp, Thomas McDonald and Rowan Murphy outlining experience in fauna identification). Sighted two completed pre and post clearing survey forms from 20 August 2013.</p>
36	Should any Grey-crowned Babblers be identified on the site, the Proponent shall develop measures to either relocate the birds or protect them and their roosting habitat from disturbance during vegetation clearing and construction works.	Compliant	Protocols for the management of Grey-crowned Babblers included in section 8.1 of BMP.
Biodiversity Management Plan			
37	The Proponent shall prepare a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This plan must:		A Biodiversity Management Plan (BMP) was prepared as part of the EMS to meet the requirements of Clause 37.
	(a) be prepared in consultation with OEH, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;	Compliant	<p>Consultation with OEH was conducted as required, sighted letter 22 January 2013 from Peter Christie, OEH to Collean Measday, TGO re: approval of BMP.</p> <p>Sighted DP&E approval of BMP, email from Kane Winwood DP&E to Collean Measday TGO 17 June 2013.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(b) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;	Compliant	<p>Integration of biodiversity and rehabilitation is occurring through the monitoring program where one external consultant, DnA Environmental, has been engaged to monitor both aspects.</p> <p>BMP does not address rehabilitation as this is covered in the Rehabilitation Management Plan (part of the MOP).</p>
	<p>(c) describe the short, medium, and long term measures that would be implemented to:</p> <p>(i) manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and</p> <p>(ii) implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria;</p>	Compliant	<p>The short, medium and long-term measures to manage remnant vegetation and habitat onsite are outlined in Section 8.8. Implementation of the biodiversity offset strategy including performance and completion criteria are included in Section 7 of the BMP, and in Schedule 2 and Appendix A of the PVP.</p>
	(d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);	Compliant	<p>Performance and completion criteria for the biodiversity offset strategy are included in Section 7.6 of the BMP with a discussion on risks to successful implementation of the strategy in Section 7.5.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	<p>(e) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:</p> <p>(i) enhancing the quality of existing vegetation and fauna habitat;</p> <p>(ii) restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary);</p> <p>(iii) maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;</p> <p>(iv) collecting and propagating seed;</p> <p>(v) minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;</p> <p>(vi) controlling weeds and feral pests;</p> <p>(vii) controlling erosion;</p> <p>(viii) managing grazing and agriculture on site;</p> <p>(ix) controlling access; and</p> <p>(x) bushfire management;</p>	Compliant	<p>The BMP includes detailed descriptions of the mid-term measures that would be implemented over the next three years in Section 8.8.2 and in more detail in the following sections:</p> <ul style="list-style-type: none"> • Replanting/supplementary planting where natural regeneration isn't sufficient and introduction of naturally scarce fauna habitat features – Sections 8.6 and 8.9. • Salvaging of resources – Section 8.10. • Collecting and propagating seed – Section 8.11. • Clearing management, fauna management, and cyanide impact – Section 8.1, 8.4 and 9.1. • Weed and feral species management – Section 8.2 and 8.7. • A sediment and erosion control plan is included in the WMP see Clause 32 (b) (ii). • Grazing management – Section 8.13. • Access to the site and minimising disturbance of protected areas – Section 8.8.2. Fencing and signage of protection of remnants and no go zones were observed during the site inspection. • Management of fire for conservation including information on previous fire history for the site – Section 8.3.
	<p>(f) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p>	Compliant	<p>Section 9 of the BMP outlines the annual spring monitoring program and the first monitoring report was provided at the audit, 2014 Rehabilitation and Biodiversity Monitoring Report for Tomingley Gold Mine, Tomingley Gold Operations dated August 2014 by DnA Environmental.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and	Partially Compliant	<p>Section 8.8 identifies triggers for further action, not specifically risks or actual contingency measures.</p> <p>TARPs have been developed for rehabilitation in the MOP.</p> <p>Recommendation 8: Consider the development of TARPs or equivalent for identifying and addressing potential risks to the successful implementation of the Biodiversity Offset Strategy.</p>
	(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Compliant	Roles and responsibilities of personnel are outlined in Section 12 of the BMP.
Conservation Bond			

Number	Condition	Compliance	Audit Findings
Schedule 3			
	<p>Within three months of the approval of the Biodiversity Management Plan, the Proponent shall lodge a conservation bond with the Department to ensure that the biodiversity offset is implemented in accordance verified by a suitably qualified rehabilitation specialist or quantity surveyor.</p> <p>The sum of the bond shall cover the full cost of implementing the Biodiversity Offset Strategy and be verified by a suitably qualified rehabilitation specialist or quantity surveyor.</p> <p>If the biodiversity offset is implemented to the satisfaction of the Director-General, the Director-General will release the conservation bond. If the offset strategy is not implemented to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the biodiversity offset.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>With the agreement of the Director-General, this bond may be combined with the rehabilitation security deposit administered by DRE.</p>	Compliant	<p>Sighted email from Kane Winwood DP&E to Mark Williams TGO on 15 May 2014 that confirmed that the conservation bond that TGO had submitted was sufficient.</p> <p>The biodiversity offset is yet to be completed and therefore the Director-General is still in possession of TGO's conservation bond.</p>
HERITAGE			
Heritage Management Plan			
39	The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:	Compliant	A Cultural Heritage Management Plan (CHMP) was developed as part of the site EMS to satisfy Clause 39.

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(a) be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Director-General;		Prior approval was sought for Dr Jodie Benton of OzArk Environment and Heritage Management to prepare the CHMP. Evidence was provided of the approval with an email from David Kitto, DP&E to Collean Measday, TGO from 6 August 2012.
	(b) be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);		TGO consulted with OEH and Aboriginal stakeholders as required by Clause 39 (b). Evidence of consultation with OEH was an email from Robert Taylor, OEH to Collean Measday, TGO from 12 July 2012 providing OEH's Preparation and Implementation of an Aboriginal Cultural Heritage Management Plan; A checklist for proponents of major projects. Evidence of consultation with Aboriginal stakeholders was evidenced by a letter dated 10 July 2012, from Phil Cameron, OzArk to Collean Measday, TGO confirming the consultation with Aboriginal stakeholders that took place during preparation of the CHMP.
	(c) be submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;		Sighted letter of approval from Kane Winwood, DP&E to Collean Measday, TGO dated 29 October 2012.
	(d) include the following for the management of Aboriginal heritage: (i) a description of the measures that would be implemented for: <ul style="list-style-type: none"> • protecting, monitoring and/ or managing heritage items on site; • implementing proposed archaeological investigations and/ or salvage measures for heritage items on site; • managing the discovery of any human remains or previously unidentified Aboriginal objects on site; • maintaining and managing reasonable access for Aboriginal 	Compliant	The CHMP includes a range of measures to manage Aboriginal heritage throughout the construction and operation of the mine, particularly Section 7. <ul style="list-style-type: none"> • Sighted sign posting and fencing off of heritage items during site inspection. Sighted letter to Phil Cameron, OzArk from Collean Measday, TGO regarding changed management arrangements for cultural heritage site TGP-0S2 signed by Phil Cameron on 14 January 2013 to confirm his agreement with the changed arrangements. • Salvage is addressed in Section 7.3 however there are no details on how this would be undertaken. Sighted photo records of salvaged historic heritage items however it doesn't appear that there was a register of salvaged items established for the project. The cultural heritage consultant, OzArk, provided a report Archaeological Test

Number	Condition	Compliance	Audit Findings
Schedule 3	<p>stakeholders to heritage items on site;</p> <ul style="list-style-type: none"> • on-going consultation with the Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage on site; and • ensuring workers on-site receive suitable heritage inductions prior to carrying out works on the site, and that suitable records are kept of these inductions; <p>(ii) a strategy for the storage of any heritage items salvaged on site, both during the project and in the long term;</p>		<p>Excavation Report – TGP-HS6 and TGP-HS5 dated February 2012, where they state that a comprehensive photographic record was collected, and that no further investigation or archival documentation is necessary. OzArk also provided a report to TGO on 5 July 2013 re artefacts removed during test excavations at TGP and noted that the recovered artefacts were sent to Alkane GM Mike Sutherland.</p> <ul style="list-style-type: none"> • Section 7.3.4 of CHMP outlines the protocol for management of unexpected finds. No unexpected finds were discovered during construction or since commencement of operations. • Section 5.1 includes consultation with the Aboriginal community. • Section 16 includes the requirement for all TGO personnel to undergo a project induction that includes information on known heritage items on site, discovery of unknown items and responsibilities for protecting and reporting items. Sighted record of toolbox meeting 23 July 2013 regarding staff awareness of heritage items. Sighted Environmental Induction Water Pipeline Construction that was provided to construction personnel for the water pipeline that addressed heritage awareness. Sighted extracts from general staff induction that the Manager Environment and Community delivers that address cultural heritage.

Number	Condition	Compliance	Audit Findings
Schedule 3			
	<p>(e) include the following for the management of non-Aboriginal heritage:</p> <p>(i) a description of the measures that would be implemented for:</p> <ul style="list-style-type: none"> • protecting, monitoring and/ or managing heritage items on site; • managing the discovery of any previously unidentified non-Aboriginal objects on site; and • ensuring workers on-site receive suitable heritage inductions prior to carrying out works on the site, and that suitable records are kept of these inductions; and <p>(ii) a strategy for the storage of any heritage items salvaged on site, both during the project and in the long term.</p>	Compliant	<p>Historic heritage management is included in Section 8 of the CHMP. Table 5 summarises management actions to protect known historic heritage items.</p> <p>The CHMP does not include an unexpected finds protocol for items of historic heritage. Staff indicated that no unexpected heritage items have been discovered during the construction and operation of the mine site.</p> <p>No information is included in the CHMP for the storage of salvaged historic heritage items.</p> <p>Refer to Clause 39 (d) for information on staff training in heritage.</p>
TRANSPORT			
Dangerous Goods			
40	Transportation of all dangerous goods to or from the site shall be undertaken in strict accordance with Australian Code for the Transport of Dangerous Goods by Road and Rail.	Compliant	<p>Sighted agreement between TGO and Orica Australia Pty Ltd regarding supply of sodium cyanide dated 15 November 2013. This included a commitment to 'comply with...all applicable laws...relating to supply of the product'. There is no specific reference to the Australian Dangerous Goods Code.</p> <p>A Sodium Cyanide Transport Hazard Analysis (Sherpa Consulting, 29 April 2014) was conducted, as a recommendation of the Final Hazard Analysis. This stated that 'as part of the licensing requirements for transport of dangerous goods under the ADGC, the transporter must prepare a detailed route specific transport risk assessment'.</p>
Road Upgrades			

Number	Condition	Compliance	Audit Findings
Schedule 3			
41	By 31 March 2014, the Proponent shall upgrade Tomingley West Road between the intersection with Narromine-Tomingley Road and the intersection with the mine access road, to the satisfaction of Council.	Compliant	The Tomingley West Road has been upgraded as required by Condition 41 as sighted at the audit, and confirmation of Council approval of the detailed design plans is provided in a letter from Les Simons, NSC to Alistair Whittle, Geolyse dated 3 October 2012.
Access Road Construction			
42	By 31 March 2014, the Proponent shall construct the site access road intersection with Tomingley West Road in accordance with the requirements of Council.	Compliant	Refer to Clause 41.
Operating Conditions			
43	The Proponent shall ensure that heavy vehicle movements associated with mining operations do not exceed 8 per day (4 in and 4 out), when measured as a daily average over any calendar month.	Not Verified	TGO do not maintain records of heavy vehicle movements to determine compliance or otherwise with this clause. Recommendation 9: Maintain records of heavy vehicle movements to demonstrate compliance with the requirement to limit movements to 8 per day.
Traffic Management Plan			
44	The Proponent shall prepare and implement a Traffic Management Plan to the satisfaction of the Director-General. The plan shall:	Compliant	A Traffic Management Plan (TMP) was developed as part of the EMS.
	(a) focus on traffic management along Tomingley West Road and through the village of Tomingley to minimise the potential for conflicts between project-related traffic and other road users;		Section 3 of the TMP provides details of traffic types and volumes, and Section 4 includes management measures to be implemented to mitigate the increased traffic.
	(b) describe the measures to be implemented to ensure the effective operation of the intersections between the project site and the Newell Highway, including the site access road and Tomingley West Road intersection and the Tomingley-Narromine Road and Newell Highway intersection; and		Refer to Clause 44 (a).

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(c) be developed in consultation with Council and RMS, and must be submitted for the approval of the Director-General prior to the commencement of construction.		A TMP was developed in consultation with NSC and Roads and Maritime Services (RMS) as demonstrated by consultation included in Appendix A. Sighted letter of approval from Kane Winwood, DP&E to Collean Measday, TGO dated 29 October 2012.
VISUAL			
Operating Conditions			
45	<p>The Proponent shall:</p> <p>(a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project;</p> <p>(b) establish and maintain an effective vegetation screen and vegetated amenity bund consistent with the documents in condition 2 of schedule 2;</p> <p>(c) ensure no outdoor lights shine above the horizontal; and</p> <p>(d) ensure that all external lighting associated with project complies with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting, to the satisfaction of the Director-General.</p>	Compliant	<p>TGO Environment personnel have undertaken an audit of the site's lighting. Sighted Obtrusive Lighting Report which reviewed compliance with this Clause and Clause 10.6 of the Statement of Commitments.</p> <p>Fixed lighting standards are designed to comply with AS 4282 and TGO have constructed a vegetated amenity bund and vegetation screening around the site particularly along the highway and the edge of Tomingley village. This was sighted during the site inspection. Some lighting is required to shine above the horizontal e.g. lighting access areas.</p>
Additional Visual Mitigation Measures			
46	<p>Upon receiving a written request from the owner of any residence on privately-owned land which has, or would have, significant direct views of the project operations, the Proponent shall implement visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed toward minimising the visibility of the project operations from the affected residence.</p> <p>If within three months of receiving this request from the</p>	Compliant	<p>TGO have been in contact with two residents adjacent to the mine site regarding planting on their property to provide a visual screen from the mine and to aid in dust mitigation, Gai Strahorn and Barry Unger. This correspondence has been verbal in nature therefore no correspondence was sighted at audit.</p> <p>TGO have engaged Narromine Transplants to raise approximately 2000 seedlings, sighted email from Alex Cliffe at Narromine Transplants to Addy Watson TGO 1 August 2014. These seedlings are intended to be planted once offset areas are fenced and weather is conducive to plant survival.</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
	landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.		
HAZARDOUS MATERIALS			
Final Hazard Analysis			
47	<p>The Proponent shall prepare a Final Hazards Analysis (FHA) for the project to the satisfaction of the Director-General, in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis.</p> <p>Note: if the project design is no different from that assessed in the Preliminary Hazard Analysis (PHA), then the Director-General will accept the PHA as the FHA.</p>	Compliant	A Final Hazards Analysis (FHA) was conducted by an external consultant, Sherpa Consulting. The associated report references the Hazardous Industry Planning Advisory Paper No. 6, and clarified that the inventory of hazardous goods had changed from the Preliminary Hazard Analysis and therefore warranted a FHA.
Hazardous Materials Management Plan			
48	The Proponent shall prepare and implement a Hazardous Materials Management Plan for the project to the satisfaction of the Director-General. The plan must:	Partially Compliant	A Hazardous Materials Management Plan (HMMP) was prepared as part of the EMS.
	(a) be prepared in consultation with relevant government agencies including Council, RMS, EPA, NOW, WorkCover NSW and DRE;		The HMMP was prepared in consultation with the agencies required by Clause 48 (a) as demonstrated by the correspondence included in appendices.
	(b) be consistent with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold;		<p>TGO advise that the HMMP has been developed to be consistent with the code. TGO purchase cyanide from a certified supplier (Orica) and the onsite system is designed and built by Orica.</p> <p>Sighted: Commissioning Instruction Tomingley Gold Mine 13 January 2014, Cyanide System Handover RFO (acceptance of commissioning certificate) 20 January 2014, Supply Agreement between TGO and Orica executed 25 November 2013, Construction Review and Reservation</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<p>Register 20 January 2014, TGO Full Sparge Operating Procedure 20 January 2014, Completed Orica Onsite Inspection Checklist to ensure the safe delivery of Sodium Cyanide 17 July 2014.</p> <p>Sighted: Inspection checklist that includes observation of wildlife on RSF and reporting requirements and freeboard, procedures for conducting cyanide monitoring include Use and Maintenance of Cynoprobe v1 July 2014, Free Cyanide Titration July 2014, Use of Cyanide Test Strips January 2014 and responding to high HCN alarm July 2014.</p> <p>Sighted cyanide training material provided by Orica, and Orica Cyanide Awareness Questionnaire.</p>
	(c) be submitted to the Director-General for approval prior to commencing mining operations;		No evidence of correspondence with the DG was sighted to confirm submission and/or approval.
	<p>(d) describe the measures that would be implemented to:</p> <p>(i) ensure sodium cyanide and other toxic chemicals are stored and handled on the site in accordance with AS/NZ 4452 – The Storage and Handling of Toxic Substances; and</p> <p>(ii) ensure the transportation of hazardous materials to or from the site is undertaken in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 11 – Route Selection and the Australian Code for the Transport of Dangerous Goods by Road and Rail – current version; and</p>		<p>The HMMP states that storage and handling will be in accordance with AS 4452 and transport will be in accordance with the Hazardous Industry Planning Advisory Paper No. 11 and the ADGC. TGO have a number of procedures in place to achieve these objectives including:</p> <ul style="list-style-type: none"> • Unloading reagents procedure - Orica supply Hydrochloric Acid and Caustic, they audit facilities. • Sighted acknowledgement letter from Fiona Hayman, Workcover to Sean Buxton, TGO dated 25 September 2013 regarding initial notification for dangerous goods on site. This letter requires annual notification and requirement to notify them of changes within 14 days. Sighted another acknowledgement letter from F. Hayman, Workcover to S. Buxton, TGO dated 15 May 2014. • Sighted Product Supply Agreement between Orica and Tomingley regarding supply of cyanide which states that Orica will abide by all laws with regards to delivery of the product to site. • Sighted Sodium Cyanide Transport Hazard Analysis in accordance with the requirements of the ADGC to assess route selection.

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(e) detail the emergency procedures for the Project consistent with the Department's Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning.		<p>HMMP states that emergency procedures will be in accordance with the Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning.</p> <p>Sighted TGO Emergency Management Plan February 2014 which includes chemical spill as one type of incident however it doesn't include any specific response procedures for the types of hazardous materials maintained at site, separate procedures are maintained for different incident types including Responding to Spill Containing Cyanide January 2015.</p> <p>Sighted Reagent, Elution and Services Training Manual that includes instruction on PPE for working with cyanide and references response procedures. Sighted Pollution Incident Response Management Plan (PIRMP) January 2014 that includes response and reporting arrangements for incidents likely to cause material harm to people or the environment.</p> <p>Sighted training material outlining emergency response and PIRMP information, emails from Ken Bermingham, Safety & Training Manager to superintendents requesting that they deliver toolbox meetings on emergency response, pollution response and spill response, completed emergency training questionnaire for Trent Smith dated 2 January 2014, and record of emergency response scenario for a cyanide spill conducted on 18 December 2014.</p> <p>Recommendation 10: Reference the Site Specific Procedures in the Emergency Management Plan for responding to incidents associated with the types of hazardous materials maintained at site.</p>
WASTE			
49	The Proponent shall:		

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(a) minimise the waste generated by the project;	Compliant	<p>Waste generation on site is minimised evidenced by:</p> <ul style="list-style-type: none"> • Correspondence with Tandara recycling regarding minimising waste and options for waste management. Treated effluent reused on biodiversity offset area. Cardboard recycling. • Waste sources: hydrocarbons - removed from site, chemical containers, used tyres, scrap materials, packaging materials. • Waste oil and grease removed from site by JR Richards. Copy of service dockets 13 January 2015 and 24 September 2014.
	(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and	Compliant	<p>Waste generated by the project is appropriately managed as evidenced by:</p> <ul style="list-style-type: none"> • Sighted a range of waste storage areas during the site inspection including the stores warehouse, hydrocarbon storage and administration building. • Observed segregation of waste materials for recycling and disposal, where required, wastes were stored undercover to avoid buildup of contaminated water from rainfall. Sighted appropriate documentation for asbestos contractor (refer to Schedule 2 Clause 9). Sighted • Sighted TGO Waste Report December 2014 that included a receipt for removal of mixed solid waste and recyclables for that month, and an annual waste register that includes waste oil materials, recyclables and mixed solid waste. Sighted • Waste Tracking Certificate 22 September 2014 for waste oil transport and disposal that included quantity, type, transporter and receival facility. • Sighted TGO Environment Inspection Form that includes waste criteria.
	(c) manage on-site sewage treatment disposal in accordance with the requirements of Council, to the satisfaction of the Director-General.	Partially Compliant	<p>Package sewage treatment plant commissioned for the treatment of site effluent. Evidence provided of approval from NSC via letter from Chris Brook, NSC to Oliver-Higgins Wastewater dated 23 October 2013 that gave approval pursuant to TGO meeting the conditions of consent. In confirming that the STP is being operated in accordance with the</p>

Number	Condition	Compliance	Audit Findings
Schedule 3			
			<p>conditions of consent, TGO confirmed that the contractor engaged to service the STP is a licensed plumber Peter Kinsela Plumbing, provided a Service Agreement for Quarterly Service and Inspection of a Containerised Sewerage Treatment Plant that was executed following completion of the audit that included quarterly inspection and servicing. The effluent disposal area was not sighted during the site inspection. No evidence was provided of council inspection of the facilities or completed inspection checks conducted by the plumber. GHD did not review the requirements of the Local Government (General) Regulation 2005 to determine if the STP meets this regulation. GHD conducted a walkover of the septic holding tanks and pipelines, as well as inspected the STP which are currently not protected from possible vehicle damage.</p> <p>Recommendation 11: Install bollards around the inlet to the Sewerage Treatment Plant and around the STP to protect from onsite traffic movements.</p>
REHABILITATION			
50	Within three years of the date of this approval, the Proponent shall investigate the feasibility of filling the Wyoming Three open cut pit void as part of the rehabilitation of the site, in consultation with DRE.	Not Applicable	To date nothing has happened regarding this condition. This matter is to be assessed as part of Modification 3 of the project approval.
Rehabilitation Objectives			

Number	Condition	Compliance	Audit Findings												
Schedule 3															
51	<p>The Proponent shall rehabilitate the site to the satisfaction of the Executive Director, Mineral Resources. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (as reproduced in Appendix 6), and comply with the objectives in Table 9.</p> <table border="1"> <caption>Table 9: Rehabilitation Objectives</caption> <thead> <tr> <th>Feature</th> <th>Objective</th> </tr> </thead> <tbody> <tr> <td>Mine site (as a whole) including final voids</td> <td>Safe, stable and non-polluting</td> </tr> <tr> <td>Final voids</td> <td>Minimise the total volume and depth of final voids subject to detailed resource definition</td> </tr> <tr> <td>Surface infrastructure</td> <td>To be decommissioned and removed, unless the Executive Director, Mineral Resources agrees otherwise</td> </tr> <tr> <td>Other land</td> <td>Establish at least 61 ha of open woodland as part of the Remnant Extension described in Table 8.</td> </tr> <tr> <td>Community</td> <td>Minimise the adverse socio-economic effects associated with mine closure</td> </tr> </tbody> </table>	Feature	Objective	Mine site (as a whole) including final voids	Safe, stable and non-polluting	Final voids	Minimise the total volume and depth of final voids subject to detailed resource definition	Surface infrastructure	To be decommissioned and removed, unless the Executive Director, Mineral Resources agrees otherwise	Other land	Establish at least 61 ha of open woodland as part of the Remnant Extension described in Table 8.	Community	Minimise the adverse socio-economic effects associated with mine closure	Compliant	The rehabilitation strategy is outlined in the MOP (2nd; 2014). Sighted letter from Michael Young, T&I to Sean Buxton, TGO dated 13 May 2014 re approval of MOP.
Feature	Objective														
Mine site (as a whole) including final voids	Safe, stable and non-polluting														
Final voids	Minimise the total volume and depth of final voids subject to detailed resource definition														
Surface infrastructure	To be decommissioned and removed, unless the Executive Director, Mineral Resources agrees otherwise														
Other land	Establish at least 61 ha of open woodland as part of the Remnant Extension described in Table 8.														
Community	Minimise the adverse socio-economic effects associated with mine closure														
Progressive Rehabilitation															
52	<p>The Proponent shall carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable after disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies shall be employed when areas prone to dust generation cannot yet be permanently rehabilitated.</p> <p>Note: It is accepted that some parts of the site that are progressively rehabilitated may be subject to further disturbance at some later stage of the project.</p>	Compliant	<p>TGO are yet to commence rehabilitation of the site as dry weather conditions have not made it reasonably practicable to do so. The first stage of rehabilitation is due to commence with rehabilitation of the lower eastern face of WRE2.</p> <p>TGO have had discussions with Mark Bucken, T&I regarding delays to rehabilitation due to dry weather conditions. T&I have indicated that they are happy for rehabilitation to be postponed until weather conditions improve, and TGO will notify them when a decision made to start rehabilitation works.</p>												
Rehabilitation Management Plan															
53	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:</p>	Compliant	The rehabilitation management plan is incorporated into the MOP.												
	<p>(a) be prepared in consultation with the Department, OEH, EPA, NOW and Council;</p>		Consultation with government departments is included in the MOP, appendix 5, which includes a table of comments and reference to section in the MOP where it is addressed.												

Number	Condition	Compliance	Audit Findings
Schedule 3			
	(b) be submitted to the Executive Director, Mineral Resources for approval by the end of March 2013, unless the Director-General agrees otherwise;		Refer to Clause 51.
	(c) be prepared in accordance with any relevant DRE guideline;		The MOP references the current ESG3 Mining Operations Plan Guidelines, September 2013.
	(d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 51;		The procedures to achieve the rehabilitation objectives are set out in Section 7.2.
	(e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;		The MOP references the BMP in discussing the Conservation and Biodiversity Offset Domain. The monitoring program for rehabilitation and biodiversity has been combined and is undertaken by DnA Environmental.
	(f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);		Detailed performance criteria are included in Section 6 of MOP, and trigger action response plans (TARPs) are included in Section 9.2.
	(g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final ladform, and final land use;		The MOP addresses all of these issues, mine closure will be described in more detail in a future MOP when closure is imminent.
	(h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;		Section 5.3 of the MOP addresses interim rehabilitation. TGO have found this a challenge to manage on the ground.
	(i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and		A biodiversity and rehabilitation monitoring program has been established utilising external consultant DnA environmental. Sighted Biodiversity and Rehabilitation Report although this only included review of biodiversity works as no rehabilitation has been undertaken to date.
	(j) build, to the maximum extent practicable, on the other management plans required under this approval.		The MOP avoids duplication and makes reference to other TGO management plans where relevant.

Table 7 Project Approval Conditions – Schedule 4

Number	Condition	Compliance	Audit Findings										
Schedule 4													
ADDITIONAL PROCEDURES													
NOTIFICATION OF LANDOWNERS													
1	<p>Within 1 month of the date of approval, the Proponent shall notify in writing</p> <p>(a) the owner of land listed in Table 1 of schedule 3 that they have the right to require the Proponent to acquire their land at any stage during the project; and</p>												
	<p><i>Table 1: Land subject to acquisition upon request</i></p> <table border="1"> <thead> <tr> <th>Lot</th> <th>DP</th> </tr> </thead> <tbody> <tr> <td>156</td> <td>755093</td> </tr> <tr> <td>157</td> <td>755093</td> </tr> <tr> <td>162</td> <td>755093</td> </tr> <tr> <td>173</td> <td>755093</td> </tr> </tbody> </table>	Lot	DP	156	755093	157	755093	162	755093	173	755093	Compliant	TGO advised that it had notified, in writing (letter dated 20 August 2012), the owner of the lots listed. One landholder owns all of the lots listed, they have not requested acquisition.
Lot	DP												
156	755093												
157	755093												
162	755093												
173	755093												
	(b) the owners of receivers R3 and R29 that they have the right to request the Proponent to ask for additional noise mitigation measures to be installed at their residence at any stage during the project.	Compliant	TGO has notified the current owner of R3 and R29 in writing - letter dated 21 August 2012. Neither landholder has complained. Acoustic treatment will be undertaken at both dwellings as part of works in the village. Sighted MOU between Christine Sonter and TGO dated 12 March 2015.										
2	<p>Within two weeks of obtaining monitoring results showing:</p> <p>(c) an exceedance of any relevant noise criteria in Schedule 3, the Proponent shall notify affected landowners and/ or tenants in writing</p>												
		Non Compliant	TGO is in regular contact with the members of the community in particular those most exposed to mine dust and noise.										

Number	Condition	Compliance	Audit Findings
Schedule 4			
	<p>of the exceedance, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria; and</p> <p>(d) an exceedance of any relevant air quality criteria in Schedule 3, the Proponent shall send the affected landowners and/or tenants a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time).</p>		<p>TGO does not have processes in place that ensures notification of affected landowners and/or tenants in writing of the exceedances.</p> <p>Corrective Action 6: For noise and air quality exceedances, develop processes that allow timely review of the monitoring data and notification to affected residences in accordance with the Project Approval.</p>
INDEPENDENT REVIEW			
3	If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.	Not Applicable	This clause has not been triggered.
4	If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.	Not Applicable	This clause has not been triggered.
5	If the independent review determines that the project is not complying with the relevant criteria in Schedule 3, then the Proponent shall:	Not Applicable	This clause has not been triggered.
LAND ACQUISITION			
6	Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:	Not Applicable	This clause has not been triggered.

Table 8 Project Approval Conditions – Schedule 5

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING			
ENVIRONMENTAL MANAGEMENT			
Environmental Management Strategy			
1	The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:	Compliant	TGO have developed an Environmental Management Strategy (EMS) to provide a framework for all environmental management for the site. The strategy met the requirements of this clause as evidenced by:
	(a) be submitted for approval to the Director-General prior to construction;		<ul style="list-style-type: none"> • letter from Kane Winwood to Collean Measday 20 October 2012 that confirmed department approval of the EMS. • Statutory approvals for the EMS are outlined in Section 5. • Roles and responsibilities are outlined in Section 16 of the EMS • Section 14 of the EMS addresses community consultation. TGO have established a Community Consultative Committee (CCC) as required by the project approval and minutes from CCC meetings are on the TGO website. A quarterly newsletter is also delivered to local residents, with copies also available at the BP service station and on the TGO website. • Section 15 of the EMS addresses complaints and dispute resolution. Sighted TGO community enquiry database. Noted that noise actions not yet closed out as acoustic treatments are yet to be completed. Complaints are predominantly regarding noise and dust. Community complaints response site specific procedure sighted dated 20 October 2014. Complaints line is advertised in the newspaper. • Complaints are recorded as an incident if they involve a breach of commitments (e.g. approval conditions, licence limits), cause environmental harm, harm to people or involves a threat. Following on from the EPA risk audit, the EPA wish to be notified every time there is an exceedance of the EPL criteria (e.g. noise, air, overpressure), environment personnel
	(b) provide the strategic framework for the environmental management of the project;		
	(c) identify the statutory approvals that apply to the project;		
	(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;		
	(e) describe the procedures that would be implemented to:		
	(i) keep the local community and relevant agencies informed about the operation and environmental performance of the project;		
	(ii) receive, handle, respond to, and record complaints;		
	(iii) resolve any disputes that may arise during the course of the project;		
	(iv) respond to any non-compliance;		
	(v) respond to emergencies; and		

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
			<p>call the EPA line and email the EPA. Sighted email from M. Williams, TGO to Michelle Gibson, EPA on 9 March 2015 re: exceedances of dust criteria.</p> <ul style="list-style-type: none"> • Section 10 of the EMS addresses non-compliance, corrective and preventative action. Non-compliances are reported in the monthly monitoring report on website, recorded in C-Safe and MIINT. A non-compliance procedure is provided in the EMS. Records of non-conformances included in C-Safe, sighted records of overpressure exceedance, duck mortality, and dust exceedance. These records include corrective actions, responsibilities, close out of actions etc. • Section 11 of EMS is the Pollution Incident Response Management Plan (PIRMP). This incident plan addresses incidents that cause material harm to the environment. Incident Reporting and Investigation Management Plan dated October 2013 addresses non-reportable incidents. This plan defines what constitutes an incident, types of environmental incidents, and includes a form for incident investigation. Environmental incident identification and reporting is included in staff induction
	<p>(f) include:</p> <p>(i) copies of any strategies, plans and programs approved under the conditions of this approval; and</p> <p>(ii) a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.</p>	Partially Compliant	<p>Section 8 of the EMS addresses the environmental monitoring requirements of the project approval and includes a table that references the condition number, type of monitoring, method, frequency and reporting. However, the EMS has not been updated since commencement of operations or receipt of final statutory approvals. The monitoring program in Table 6 makes references such as <i>'Prior to any off site discharge, water pH EC, TSS and oil and grease will be tested to ensure compliance with section 120 of the POEO Act or any EPL Criteria'</i> and does not include ongoing groundwater monitoring required by the EPL.</p> <p>Recommendation 12: Update the Environmental Management Strategy to include the environmental monitoring requirements of the current statutory approvals.</p>

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
Adaptive Management			
2	The Proponent shall assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3.	Partially Compliant	<p>An operations wide environmental risk assessment was conducted as part of the Environmental Assessment process. In developing the Mining Operations Plan (MOP), this risk assessment was reviewed for relevance and the MOP states that the original risks continue to be key risks for the site and are the focus of the mine's operational management and controls.</p> <p>TGO manage environmental risks through a range of management plans as referenced throughout this audit report. The majority of these plans don't however include identification and management of environmental risks. TGO personnel also advised that JSEAs are prepared for a range of activities to be undertaken at site.</p> <p>Recommendation 13: As management plans are progressively updated, include the identification of relevant environmental risks and the management controls to mitigate the identified risks.</p>
3	<p>Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent shall, at the earliest opportunity:</p> <p>(a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;</p> <p>(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and</p> <p>(c) implement remediation measures as directed by the Director-</p>	Non Compliant	<p>Refer to Schedule 3 Clause 23 and Schedule 5 Clause 7.</p> <p>Exceedances of performance criteria outlined in the Project Approval that have occurred for air, noise and water, have not been reported to the DP&E by TGO as required by Clause 3. Observations during the site audit concluded that all reasonable and feasible measures to prevent the exceedance from recurring were not being implemented e.g. standing down plant in high wind conditions.</p> <p>As discussed in Clause 7, this was also the case for environmental incidents.</p> <p>TGO have since been requested by the EPA to report exceedances of performance criteria in the EPL to them in a similar manner.</p> <p>Corrective Action 7: Develop a procedure that addresses</p>

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
	General, to the satisfaction of the Director-General.		<i>notification and reporting requirements for instances of exceedances of performance criteria for both the EPA and DP&E.</i>
Management Plan Requirements			
	3. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:...	Not Verified	For the purpose of this audit, the management plans have not been verified against the requirements of this clause as they have been endorsed by Planning as outlined in Schedule 3.
Annual Review			
4	By the end of March each year following the commencement of construction, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:	Compliant	TGO prepared their first AEMR in 2014, sighted 12 June 2014. This AEMR addressed operations in 2013 and hence did not include a full year of operations. Sighted minutes from 2 October 2014 AEMR meeting, feedback from this meeting included a number of recommendations of items to include in the 2014 AEMR. The current AEMR is being drafted at the moment with the aim to submit it by the end of March 2015.
	(a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;		No rehabilitation has been undertaken at site to date.
	(b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the:		Section 4 of the AEMR reviews environmental performance against statutory requirements, requirements of any plans and monitoring results. Results were not compared with predictions in the EA in a number of instances due to the limited data available at the time of preparing the AEMR.
	(i) the relevant statutory requirements, limits or performance measures/criteria;		
	(ii) requirements of any plan or program required under this approval;		
	(iii) the monitoring results of previous years; and		
	(iv) the relevant predictions in the EA;		

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
	(c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;		The 2013 AEMR included details of two incidents that constituted non-compliances with the site's EPL and the actions that were being taken to prevent those incidents recurring. It is unclear whether any other non-compliances with other statutory approvals or site procedures occurred during the reporting period.
	(d) identify any trends in the monitoring data over the life of the project;		This condition is not applicable for first AEMR of the project.
	(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and		This condition is not applicable for first AEMR of the project.
	(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.		Section 6 of the AEMR outlined a programme of works to be done in the following year to improve the environmental performance of the project.
Revision of Strategies, Plans and Programs			
5	Within three months of:	Partially Compliant	<p>TGO have not consistently reviewed their strategies, plans, and programs in accordance with the requirements of this Clause.</p> <p>Following the December 2013 dust incident, TGO reviewed the Dust TARP (sighted revision date of January 2014).</p> <p>However in general, strategies, plans and programs were not reviewed within three months of AEMR completion or incidents. Sighted AQGGMP which required annual review and is yet to be reviewed.</p> <p>Recommendation 14: Implement a program of review, and where required revision, of strategies, plans and programs within 3 months of annual review, incident and audit, as required by Clause 5.</p>
	(a) the submission of an annual review under condition 4 above;		
	(b) the submission of an incident report under condition 7 below;		
	(c) the submission of an audit under condition 8 below; or		
	(d) any modification to the conditions of this approval (unless the conditions require otherwise),		
	the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.		

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
	Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.		
Community Consultative Committee			
6	<p>The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version), and to the satisfaction of the Director-General. This CCC must be operating within three months of the commencement of construction.</p> <p>Notes: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; and In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community.</p>	Compliant	<p>Sighted extract from Renewal Justification Statement EL5675 that indicated that construction commenced in mid February 2013. The first CCC meeting was in May 2013 (sighted minutes on TGO website).</p> <p>The current chair of the CCC is Mark Gardiner, letter from Mike Young, DP&E to M. Williams TGO approving his appointment 6 May 2014. Sean Buxton and Mark Williams represent TGO. Tony Ellis represents NSC. Indigenous representative Paul Brydon. Various local community representatives.</p>
REPORTING			
Incident Reporting			
7	<p>The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident.</p> <p>Within seven days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.</p>	Partially Compliant	<p>TGO environment personnel advised that during 2014, environmental incidents were not referred to the DP&E or T&I.</p> <p>However TGO have since amended their reporting requirements for incidents and did notify the DP&E and T&I of an offsite water discharge in January 2015. Sighted email from M. Williams to Kane Winwood and Elle Donnelley DP&E and Mark Buchan T&I 5 February 2015 including attached report to the EPA that addresses all of the requirements of Clause 7. See Schedule 3 Clause 23 for further information.</p>

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
INDEPENDENT ENVIRONMENTAL AUDIT			
8	One year after mining operations commence, and every three years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. The audit must: ...	Compliant	This audit report constitutes the fulfilment of this clause.
ACCESS TO INFORMATION			

Number	Condition	Compliance	Audit Findings
SCHEDULE 5			
10	<p>Prior to the commencement of construction on the site, or within 1 month of the submission of the relevant documents, the Proponent shall:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> (i) the documents referred to in condition 2 of Schedule 2; (ii) all relevant statutory approvals for the project; (iii) all approved strategies, plans and programs required under the conditions of this approval; (iv) a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any approved plans or programs required under the conditions of this or any other approval; (v) a complaints register, which is to be updated on a monthly basis; (vi) minutes of CCC meetings; (vii) the annual reviews required under this approval; (viii) any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit; (ix) any other matter required by the Director-General; and <p>(b) keep this information up-to-date, to the satisfaction of the Director-General.</p>	Partially Compliant	<p>Corporate Communications Manager TGO, confirmed that the TGO website was first created with the relevant documents on 8 November 2012 which is prior to the commencement of construction in February 2013.</p> <p>All of the documents listed in Clause 10 (a) are on the website. However, the complaints register may not always be updated monthly.</p> <p><i>Recommendation 15: Review procedures for updating the complaints register on a monthly basis.</i></p>

Table 9 Statement of Commitments

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
ENVIRONMENTAL MANAGEMENT				
Compliance with all conditional requirements in all approvals, licences and leases.	1.1 Comply with all commitments recorded in Table 3 (this table).	Continuous and as required	The extent of conformance to the statement of commitments, conditions of approval, EPL and mining lease has been outlined in the tables throughout Appendix A.	Partially Compliant
	1.2 Comply with all conditional requirements included in the: <ul style="list-style-type: none"> • Project Approval; • Environment Protection Licence; • Mining Lease(s); and • any other approvals. 	Ongoing	The extent of compliance with the Project Approval is addressed in Table 5, Table 6, Table 7 and Table 8. The extent of conformance to the criteria in the EPL is given in Table 10. Compliance with the conditions of the Mining Lease is summarised in Table 11.	Partially Compliant
Area of Activities				
All approved activities are undertaken generally in the location(s) nominated on the figures shown in Sections 2 and 4.	2.1 Mark, and where appropriate, survey the boundaries of the areas of proposed disturbance on the Mine Site.	Prior to the commencement of the relevant activity	No documented evidence was provided at audit to verify this clause.	Not Verified
	2.2 Mark, and where appropriate, survey the alignment of the Tomingley Narromine Water Pipeline.	Prior to the commencement of the relevant activity	No documented evidence was provided at audit to verify this clause.	Not Verified

Statement of Commitments																			
Desired Outcome	Action	Timing	Audit Findings	Compliance															
	2.3 Mark, and where appropriate fence, boundaries relevant to the biodiversity offset strategy.	Within 6 months of approval of the biodiversity offset strategy	The biodiversity offset strategy has been developed in the form of a Property Vegetation Plan. Refer to Schedule 3 Clause 33 which states a PVP approval date of February 2015 which would require boundaries to be marked and potentially fenced by August 2015.	Compliant															
	2.4 Construct perimeter security fence as early as possible during construction operations to limit the potential for inadvertent or unauthorised access to the operational sections of the Mine Site.	Within 3 months of commencement.	The perimeter security fence was sighted during the audit.	Compliant															
Operating Hours																			
All operations are undertaken within the approved operating hours.	3.1 Undertake all activities, where practicable, in accordance with the following operating hours.	Continuous and as required	TGO personnel advised that these operating hours are adhered to. No complaints were sighted regarding operations being conducted outside of hours.	Compliant															
	<table border="1"> <thead> <tr> <th>Activity</th> <th>Proposed Hours of Operation</th> </tr> </thead> <tbody> <tr> <td>Vegetation clearing and topsoil stripping</td> <td>7 days per week (6:00am to 6:00pm)</td> </tr> <tr> <td>Construction operations</td> <td rowspan="3">7 days per week (24 hours)</td> </tr> <tr> <td>Open cut mining operations</td> </tr> <tr> <td>Underground mining operations</td> </tr> <tr> <td>Blasting operations</td> <td>Monday to Saturday (9:00am to 5:00pm¹)</td> </tr> <tr> <td>Maintenance operations</td> <td rowspan="2">7 days per week (24 hours)</td> </tr> <tr> <td>Processing operations</td> </tr> <tr> <td>Rehabilitation operations</td> <td>7 days per week (7:00am to 10.00pm)</td> </tr> </tbody> </table> <p>Note 1: Unless required for misfire re-blast, emergency or safety reasons.</p>	Activity	Proposed Hours of Operation	Vegetation clearing and topsoil stripping	7 days per week (6:00am to 6:00pm)	Construction operations	7 days per week (24 hours)	Open cut mining operations	Underground mining operations	Blasting operations	Monday to Saturday (9:00am to 5:00pm ¹)	Maintenance operations	7 days per week (24 hours)	Processing operations	Rehabilitation operations	7 days per week (7:00am to 10.00pm)			
Activity	Proposed Hours of Operation																		
Vegetation clearing and topsoil stripping	7 days per week (6:00am to 6:00pm)																		
Construction operations	7 days per week (24 hours)																		
Open cut mining operations																			
Underground mining operations																			
Blasting operations	Monday to Saturday (9:00am to 5:00pm ¹)																		
Maintenance operations	7 days per week (24 hours)																		
Processing operations																			
Rehabilitation operations	7 days per week (7:00am to 10.00pm)																		

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Noise				
Noise generated by operational activities does not exceed intrusiveness criteria nor significantly impacts on neighbouring landowners and/or residents.	4.1 Operate mining equipment in accordance with Figures 4.11 to 4.15, or equivalent arrangement that provides for the same whole of mine sound pressure level, i.e. provides for compliant noise emissions from the Mine Site.	Ongoing	These refer to figures in the Noise Assessment by SLR. When the Noise model is updated it should reflect the latest equipment list and check if additional noise impacts are predicted. The same whole of mine sound pressure level will be checked when the noise model is updated.	Not Verified
	4.2 Provide for the enclosure, cladding or mitigation of the crushing, screening and processing plant to reduce sound power levels and ensure compliant noise emissions from the Mine Site.	Prior to commencement of crushing operations	Screening only partially complete. This is to reduce the impact of dust and noise on staff working in the immediate vicinity of the crusher. The noise consultant assessed the screening and concluded that additional screening would not provide much more noise attenuation as the side closest to residents is already screened. This action is therefore considered adequate for the purposes of noise mitigation, unless noise generated from the plant results in complaints.	Compliant
	4.3 Install frequency modulated reversing alarms on mobile equipment.	Ongoing	TGO advised that this has been installed on all equipment. Alarms observed during site visit were confirmed. Installation done by Absolute Mining as per MD615 Mining Design Guideline.	Compliant
	4.4 Undertake land preparation operations, including vegetation clearing and soil stripping, during the daytime only.		Construction is now complete however was undertaken during the daytime as per the NMP.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	4.5 Construct, Waste Rock Emplacements 2 and 3 from the northern margin of the emplacement towards the south to create a 15m high acoustic and visual amenity bund.		<p>TGO advised that a 15m high acoustic bund was not geotechnically feasible within the constraints of the site.</p> <p>An 8m high barrier is being built as recommended by the Noise Consultant. A copy of the report by the consultant has been sighted (dated December 2014) This report evaluates the effectiveness of various bund heights however does not make a recommendation as to which bund to use.</p> <p>Recommendation 16: Amend the noise management plan to acknowledge that if 15m barrier is unsafe then recommend this be removed from the statement of commitments, revise with details of the 8m barrier.</p>	Partially Compliant
	4.6 Ensure that noisy equipment is operated in exposed locations (such as on top of the acoustic bunds) or in close proximity to residences (during the daytime only and preferentially when the wind is blowing from the northwest, north or northeast).		<p>TGO advise that tracked dozer restrictions apply.</p> <p>Area of night time waste dumping mo</p> <p>Modifications made to activities when relevant and timely.</p> <p>Recommendation 17: Amend the noise management plan to include noise mitigation measures for tracked dozers at night.</p>	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	4.7 Preferentially operate noisy equipment during the evening and night, including bulldozers, excavators and haul trucks, in the southern section of the Mine Site, as close as possible to the acoustic bunds on Waste Rock Emplacements 2 and 3 and in the deepest sections of the open cuts where there would be an the most effective topographic barrier between the sources of mining-related noise and nearby residences.		The Noise Management Plan states that noisy equipment is to be stopped during the night time when needed, no tracked dozers are used on dumps during the night shift.	Compliant
	4.8 Progressively stand down the mining fleet during the onset of a temperature inversion, or as required in response to real-time noise monitoring (see Commitments 4.8 to 4.11).		Temperature inversion not monitored however noise complaints have triggered changes in fleet operation. Real time noise monitoring not an effective tool to manage noise sources onsite. Currently no triggers for temperature inversion in the automated system. TGO waiting for the new weather forecasting system that will also include temperature inversions. Corrective Action 8: Implement temperature inversion monitoring and calculation capability of the weather station.	Non Compliant
	4.9 Install a real-time noise monitor and appropriate communication equipment at an appropriate location within the southern section of the Tomingley village.	Prior to the commencement of activities on the Mine Site	Confirmed to be installed and operating. The contract date of the system was 18 September 2012.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	4.10 Establish, in consultation with a suitably qualified and experienced noise consultant and the community, appropriate noise trigger levels at the real-time noise monitoring location that would ensure that the relevant noise criteria are not exceeded at residences surrounding the Mine Site.		<p>EPL noise limits have been programmed into the system.</p> <p>Ongoing problems with the system as road traffic noise and other sources such as birds also contribute to the overall noise levels</p> <p>Exceedances detected at residence 40 Myall St Tomingley.</p>	Compliant
	4.11 Establish a procedure whereby appropriate personnel are notified when noise levels recorded by the real-time monitor reach the identified trigger levels.		<p>Inappropriate - trigger levels are influenced by nearby birds, neighbourhood dogs, and road traffic noise etc. Real time noise monitor is installed and sound recordings can be reviewed the next day where compliance is questionable. Env. & Comm manager inspection of noise data can occur at anytime and retrospectively.</p> <p>The trigger levels based on the current system are not working appropriately.</p> <p>Refer to Recommendation 3</p>	
	4.12 Establish a procedure whereby the noisiest equipment is progressively relocated or shut down to prevent further increase in the noise level received at the monitoring station (see also Commitments 4.5 to 4.7).		<p>Noisy dozers moved off waste dumps during the evening. Alternate equipment acquired.</p> <p>No set procedure in place for this although TGO have been investigating other areas to reduce noise.</p> <p>The use of the noise monitoring station is not a good way to determine noise impacts from site due to extraneous noise sources.</p>	Partially Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			Recommendation 18: Manage noise from the site in accordance with the NMP.	
Noise management plan prepared and implemented.	4.13 Prepare a Noise Management Plan that is consistent with the procedures to be developed in accordance with Commitments 4.1 to 4.12 and any negotiated agreements with residents.	Within 3 months of receiving project approval	Dates on NMP indicated submitted for approval January 2013 which is within three months.	Compliant
	4.14 Ensure that a 24-hour complaints telephone line is maintained and that the surrounding community is made aware of the number. If noise-related complaints are received.	Prior to the commencement of activities on the Mine Site	Confirmed , this is operational and reported on community documents and website.	Compliant
	4.15 Ensure that prompt action is taken to identify the nature of any complaint received and verify the relevant noise levels using the real-time noise monitoring equipment.	Within 24 hours of receipt of complaint	Additional noise (attended and unattended real time) monitoring undertaken. A review of the full version of the Community Enquiry database shows that prompt action has been taken by TGO when following up complaints however the real-time noise monitoring system doesn't readily allow verification of noise levels attributed to mine site noise only. Refer to Recommendations 2 and 3.	Partially Compliant
Surface water				

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Appropriately document Erosion and Sediment Control management measures.	5.1 Prepare a detailed Erosion and Sediment Control Plan, including a description of surface water management structures and procedures to ensure that the criteria identified in the Environment Protection Licence or project approval, assuming that they are granted, are achieved.	Prior to commencement of construction works.	Sighted ESCP June 2012 as issued for construction which is prior to the construction commencement in February 2013.	Compliant
Construct and maintain access to the Mine Site	5.2 Construct a culvert and causeway crossing over Gundong Creek to accept flows generated by rainfall events up to a 1 in 10-year ARI event before overtopping.	During site establishment phase (prior to mining)	This audit was undertaken during mine operation. Construction requirements could not be verified. The culvert and causeway crossing were sighted during the audit. The design and construction detail were not verified at the time of the audit.	Not Verified
	5.3 Maintain an alternative emergency access during flood events via the emergency site access road to the Newell Highway	Ongoing	TGO personnel advised that emergency access is maintained via the access road to the Newell Highway.	Compliant
Separate clean water from dirty water (General)	5.4 Construct temporary diversion banks on the upslope boundary of all areas to be stripped of groundcover and soil.	Prior to clearing and stripping operations	Temporary diversion banks were observed during the site inspection.	Compliant
	5.5 Construct catch banks and/or install a sediment fence on the downslope boundary of an area to be stripped of groundcover and soil.		Catch banks were observed during the site inspection.	Compliant
	5.6 Direct sediment-laden runoff into sediment basins for treatment prior to discharge (if required).	Ongoing	Observed constructed dirty water management infrastructure between the actively mined areas and the clean water diversion drain during site inspection, including sediment basins and dirty water	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			drains.	
	5.7 Construct all water management infrastructure in accordance with Volume 2E of the guideline document "Soils and Construction: Managing Urban Stormwater" (DECC, 2008b).	Construction of water management infrastructure	Erosion and Sediment Control Plan prepared by external consultant in accordance with the blue book. Observed constructed water management infrastructure during site inspection.	Compliant
Design and construct surface water management structures to prevent the discharge of polluted (elevated suspended solids) water from the Mine Site and minimise impacts on environmental flows	5.8 Construct the Western, Central and Eastern Surface Water Diversion Structures with the design specifications provided in Section 4.3.3.2.3 (unless modified by approved Erosion and Sediment Control Plan).	During site establishment phase (prior to commencement of mining)	<p>Observed constructed surface water management structures during site inspection including: western surface water diversion structure, central surface water diversion structure and catch banks 1-5.</p> <p>It is noted however that dirty water diversion infrastructure was not completed prior to commencement of mining which resulted in a discharge of dirty water offsite through the Central Water Diversion Drain (Refer to Schedule 3, Clause 23). Central Clean Water Diversion Drain has since been remediated and is performing as a clean drain. The eastern clean drain remains a earth lined drain (not sighted at audit).</p>	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	5.9 Design and construct the ESWDS to achieve satisfactory erosion control (a C-factor of 0.05 or better). The final design will be provided in the Erosion and Sediment Control Plan to be prepared in consultation with the NSW EPA and NSW Office of Water (see Commitments 5.1 and 20.1).		TGO advised that the ESWDS is due to be constructed in the 2015/16 financial year. This requirement is progressing	Compliant (to date)
	5.10 Construct Catch Banks 1 to 5 with the design specifications provided in Section 4.3.3.2.3 (unless modified by approved Erosion and Sediment Control Plan).		Observed constructed catch banks 1-5 during site inspection.	Compliant
	5.11 Construct Sediment Basins 1 to 5 with the design specifications provided in Section 4.3.3.2.4 (unless modified by approved Erosion and Sediment Control Plan).		Observed constructed sediment basins during site inspection	Compliant
	5.12 Construct drop-down structure and energy dissipaters as described in Section 4.3.3.2.6 (unless modified by approved Erosion and Sediment Control Plan).	Ongoing	This audit was undertaken during mine operation. Construction requirements could not be verified. TGO personnel advised that the drop-down structure and energy dissipaters are currently being designed.	Not Verified

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	5.13 Construct a table drain along the eastern side of the Newell Highway with the design specifications provided in Section 4.3.3.2.8 (unless modified by approved Erosion and Sediment Control Plan).	During site establishment phase (prior to commencement of mining)	TGO personnel advised that the table drain has been constructed in accordance with a revised Erosion and Sediment Control Plan.	Compliant
	5.14 Install a Relocatable Waste Water Treatment Plant (RWWTP) to provide secondary treatment of sewage within the Mine Site.		Operational package sewage treatment plant observed during site inspection.	Compliant
	5.15 Ensure that all fuel and reagent storage, delivery and handling areas are appropriately sealed and bunded and that overflow pipes are installed in a manner that would minimise the potential for pollution in the event of overfilling.	Ongoing	<p>Storage of process chemicals have been specifically designed and constructed. Sighted cyanide, hydrochloric acid, hydrogen peroxide, LPG, liquid oxygen, SMBS, copper sulfate and hydrocarbon storage during site inspection.</p> <p>All bunds were concrete and appeared to be in good condition. SMBS bags and hydrocarbons were both undercover.</p> <p>However, the following items were not installed in conformance with the NSW EPA Secondary Containment Guidelines:</p> <ul style="list-style-type: none"> • IBCs in the copper sulfate and hydrogen peroxide bunds, and drums of fuels in the hydrocarbon storage area were positioned too close to the edge of the bund which would give rise to the potential for spills of fuels and reagents outside of the bunded area. • Fuel drums were stacked in the 	Partially Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			<p>hydrocarbon storage area too close to the edge of the bund area.</p> <p>Recommendation 19: Review the bunding arrangements for IBCs and hydrocarbons against the requirements of the NSW EPA Secondary Containment Guidelines.</p>	
Design and construct surface water management structures to prevent the discharge of contaminated (hydrocarbon, cyanide, trace metals etc.) water from the Mine Site	5.16 Construct the RSF in accordance with design specifications and have QA/QC assessment completed.	During site establishment phase (prior to commencement of mining)	Refer to Schedule 3, Clause 27.	
	5.17 Construct the RSF over naturally occurring clays that achieve an equivalent permeability of 1x10-9m/s		Refer to Schedule 3, Clause 27.	
	5.18 Line the Raw Water and Processing Water Dams with an impermeable HDPE liner.		Sighted HDPE lining of Raw Water and Process Water Dams during site inspection.	Compliant.

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	5.19 Provide for design specific freeboard within the RSF (500mm which exceeds that required to prevent overtopping following a 1:10,000 year ARI 72 hour event - 460mm of freeboard), and Raw Water and Process Water Dams (200mm which exceeds that required to prevent overtopping following a 1:100 year ARI 72 hour event - 189mm of freeboard).		TGO maintain a freeboard of 500mm in the Raw Water and Process Water Dams and RSF to meet the more stringent requirements of EPL20169. Sighted procedures for management and monitoring. Refer to Schedule 3, Clause 28 and 30.	Compliant
	5.20 Securely store all hydrocarbon and chemical products.	Ongoing	Refer to Clause 5.15.	
	5.21 Ensure all hydrocarbon and chemical storage tanks are either self-bunded tanks or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity.	Ongoing	Refer to Clause 5.15.	
	5.22 Refuel all equipment within designated areas of the Mine Site, where practicable.	Ongoing	Sighted Site Traffic Management Plan January 2014 that includes designated areas for refuelling the various types of plant and vehicles on site.	Compliant
	5.23 Undertake all maintenance works involving hydrocarbons, where practicable, within designated areas of the Mine Site such as the maintenance workshop.	Ongoing	Maintenance works and minor repairs are undertaken at the Emeco workshop. Some minor service and spontaneous repairs of equipment such as excavators occurs in the pit or on nearby hardstand areas.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	5.24 Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	Ongoing	Purpose built wash down area constructed with oil/ water separator. Not sighted during site inspection however TGO personnel explained the set up and provided photos of the system which confirmed compliance with this requirement.	Compliant
Design and construct surface water management structures to prevent the discharge of saline water from the Mine Site	5.25 Line the Dewatering Dams with an impermeable HDPE liner.	During site establishment phase (prior to commencement of mining)	No saline water encountered and no saline dewatering dams constructed yet.	Not Applicable.
Only capture surface water on the Mine Site up to the 'Maximum Harvestable Right' of Proponent owned or controlled properties	5.26 Fill in or isolate from natural flows dams which would result in the capture (when combined with the Mine Site sediment basins) of greater than 51.0ML.		TGO environment personnel provided volumes of the onsite sediment basins that are capable of harvesting rainfall runoff. This demonstrated that the site has the current capacity to harvest 48.8ML which is within the harvestable right provided in this Clause.	Compliant
Implementation of a comprehensive and ongoing surface water monitoring program.	5.27 Monitor surface water quality for pH, electrical conductivity, total suspended solid concentration, Oil & Grease levels, within: <ul style="list-style-type: none"> licensed discharge points; receiving waters (Gundong Creek); and 	<ul style="list-style-type: none"> Quarterly and during surface overflow events from licensed discharge points Quarterly and within 12 hours 	Sighted results from water quality monitoring program for nominated parameters in excel spreadsheet Water Monitoring TGO R1. However TGO conduct water quality monitoring in compliance with EPL20169 which requires sampling during discharge events at the EPA's nominated	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	<ul style="list-style-type: none"> Clean, Dirty and Dewatering Dams. 	after an overflow event to the receiving waters <ul style="list-style-type: none"> Quarterly from Clean, Dirty and Dewatering Dams 	monitoring locations and for a broader suite of parameters.	
Groundwater				
Effective management of water dewatered from the open cuts	6.1 Remove water accumulating in the open cuts, transfer to Dewatering Dams and use preferentially for dust suppression activities.	Ongoing	Observed small volume of water in pit during site inspection. Refer to Schedule 3 Clause 32.	Compliant
Minimisation of groundwater contamination	6.2 Design and construct the RSF as described in the detailed design report to the NSW Dams Safety Committee prepared by D.E. Cooper & Associates Pty Ltd and illustrated by Drawing 174-11-001 Rev.0. Key design parameters would be as follows. <ul style="list-style-type: none"> Area - two cells with a combined area of 42ha. Crest elevation – 280.5m AHD. Crest width – 6m. Slope of outer face – 1:3 (V:H). Slope of inner face – 1:1.5(V:H). Key trench – up to 2m deep, base 3m wide, side slopes = 2:1 (V:H). Maximum elevation of residue – 280.0m AHD. 	During site establishment phase	Refer to Schedule 3 Clause 27.	

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	6.3 Construct the RSF over naturally occurring clays which have a permeability of less than 1x10-9m/day of depth 900mm or greater.		Refer to Schedule 3, Clause 27.	Non compliant
	6.4 Construct a drainage channel at the base of the inside wall of the RSF and directly beneath the residue inflow spigots to capture the drainage that occurs at the time of residue placement.		Drainage channel was sighted during inspection of the RSF.	Compliant
	6.5 Construct central decant towers fitted with submersible pumps in the centre of each residue cell.		Observed decant towers during site inspection.	Compliant
	6.6 Complete QA/QC works on the constructed RSF to confirm completion of design specifications.	Prior to residue deposition	Monitoring the construction of the dam was undertaken by Macquarie Geotech whom were engaged to inform the selection of soil for the construction of the RSF and to conduct extensive testing throughout the construction process. (Sighted Level 1 Geotechnical Inspection and Testing for Residue Storage Facility, Tomingley Gold Project Report August 2013) The Macquarie Geotech report concluded that the earthworks were constructed in accordance with design specifications.	Compliant
	6.7 Place residue uniformly around the perimeter of the RSF via several slurry spigots.	Ongoing	Observed distribution of spigots around the perimeter of the RSF during the site inspection. Personnel discussed the approach to operation of the spigots to	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			uniformly place residue.	
	6.8 Alternate placement of residue between the two cells, creating residue layers of approximately 1.7m in height at roughly 6 monthly intervals	Ongoing	During site inspection, only one cell was active as the second cell is being prepared for a lift of the wall.	Compliant
	6.9 Ensure immediate return of water from the RSF decant to the Raw Water Dam.	Ongoing	TGO personnel advised that decant water is piped to the Process Water Dam for use in processing.	Compliant
	6.10 Install piezometers around the perimeter of the RSF (in accordance with the plan provided by Drawing 174-11-001 Rev.0) and monitor these regularly to assess the integrity of the facility.	During site establishment phase	Sighted documentation confirming the location of the piezometers on the perimeter of the RSF, and results from monitoring of these piezometers including standing water level and water quality parameters.	Compliant
Ensure the availability of groundwater to surrounding users is maintained.	6.11 In the event that routine monitoring indicates that mining activities could be resulting in reduced groundwater availability to surrounding landholders, commission a hydrogeologist to review the data, and provide independent advice as to the cause of the trigger.	In the event that routine monitoring indicates that a groundwater availability is reduced	TGO were notified by NOW of a complaint by a neighbour who had drilled groundwater bores. NOW undertook some investigations and concluded that TGO had not impacted on the neighbour's groundwater availability.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	6.12 If a reduction in groundwater availability is determined to be as a consequence of operations associated with the Project, negotiate with the affected landowner(s) with the intent of formulating an agreement.	In the event that monitoring identifies a reduction in groundwater availability is consequence of the Project	To date, TGO operations have only intercepted a small volume (2ML) of groundwater in the open cut pit.	Not Applicable
Biodiversity				
Avoid impacts on native flora and fauna.	7.1 Align the Main Site Access Road using an existing farm track to avoid as many mature trees as practicable within a corridor containing remnant stands of Inland Grey Box – Poplar Box – White Cypress Pine.	During site establishment phase (prior to commencement of mining)	This audit was undertaken during mine operation. Construction requirements could not be verified.	Not Verified
	7.2 Locate the Mine Site activities and infrastructure so as to avoid the majority of remnant native vegetation. Restrict disturbance of remnant native vegetation to (approximately):	Ongoing	This audit was undertaken during mine operation. Construction requirements could not be verified.	Not Verified
	• 2.7ha (of 36.9ha) of Inland Grey Box – Poplar Box – White Cypress Pine tall woodland on red loams;			
	• 0.9ha (of 30.9ha) of Fuzzy Box – inland Grey Box on alluvial brown loam soils; and			
	• 18.0ha (of 70.3ha) of Belah / Black Oak Western Rosewood Wilga woodland.			

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.3 Locate the Mine Site activities and infrastructure so as to avoid disturbance to all but approximately 476 paddock trees.	During site establishment phase (prior to commencement of mining)	<p>This audit was undertaken during mine operation. Construction requirements could not be verified.</p> <p>No evidence has been sighted of an approach to avoiding paddock trees or documentation identifying which were to be retained.</p> <p>However Environment personnel advised that during construction of the Caloma pit, they were present with the construction consultant and GPS coordinates of trees approved to be felled and those to be retained, these were marked.</p>	Not Verified
Minimise impacts on native flora and fauna.	7.4 Modify the alignment of the water pipeline as necessary to avoid disturbance to a stand of vegetation which is categorised as a remnant of the Inland Grey Box Woodland EEC.	During site establishment phase (prior to commencement of mining)	Sighted Project Environmental Induction for the Narromine to Tomingley Water Pipeline that stated that the pipeline route had been changed to protect this species, required that works stay away from these trees and that no mature trees were to be removed during construction.	Compliant
	7.5 Clearly mark areas of ground disturbance prior to commencement of activities and disturbance restricted to these areas.		This audit was undertaken during mine operation. Construction requirements could not be verified.	Not Verified.

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.6 Establish clearing procedures or protocols to identify (and avoid) disturbance to nests or roosting sites of threatened fauna, e.g. grey-crowned babbler. If impact is unavoidable, engage a suitably qualified and experienced ecologist would be engaged to remove the animal(s) and/or nest/roosting habitat nests prior to clearing.		A BMP has been developed for the site's operations (Refer to Schedule 3, Clause 37). BMP addresses the protocols and procedures for management of fauna. However some clearing occurred during the breeding season in October, and nests and nestlings were required to be relocated. Some nestlings were taken into the zoo by environmental personnel for hand rearing. The zoo has indicated that they are no longer willing to accept wildlife from TGO. TGO now utilise Don Crosby veterinarian surgeon for treatment of injured/orphaned wildlife.	Compliant
	7.7 Schedule the clearing of trees with moderate or high habitat value between April to September to reduce risk of impact to tree dependant microbats and birds, in particular the Grey-crowned babbler.		Refer to Clause 7.6. TGO identified that this out of season clearing occurred due to a scheduling issue with a contractor and the issue has been addressed with the contractor so that it is unlikely to recur. TGO now have two environment personnel permanently on site to oversee operations, environmental considerations are better incorporated into planning and no further vegetation is required to be removed on site.	Partially Compliant
	7.8 Protect the ten known habitat trees on the western side of the Newell Highway and four habitat trees on the eastern side of the Newell Highway by installing high visibility fencing around these trees to provide a 25m buffer exclusion area.		Sighted high visibility fencing protecting areas along the Newell Highway during the site inspection.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.9 Undertake all clearing of trees in accordance with a Vegetation Clearing Protocol (VCP) which requires that the clearing supervisor:		Sighted clearing protocols in BMP and completed checklists. Refer to Schedule 3, Clause 35.	Compliant
	<ul style="list-style-type: none"> • check all trees for the presence of nesting or roosting fauna before felling or pushing then start tree removal immediately after visual inspection; and the operator; then 			
	<ul style="list-style-type: none"> • gradually nudge a hollow that requires removal, at intermittent intervals so that any animal occupying a habitat tree has the chance of vacating the area after the initial disturbance period. 			
	7.10 (If Grey-crowned babbler identified) delay clearing until nests are vacated. If roosting babbler persist, a suitably qualified and experienced ecologist would be engaged to remove the animal(s) and/or nest/roosting habitat prior to clearing		Refer to Schedule 3, Clause 36.	Compliant
Mitigate unavoidable impacts on native flora and fauna.	7.11 Clear sufficient vegetation for the subsequent 12 months of mining operation only.	Ongoing	Mining and planning departments develop short and long term operations plans. The Environment Team are consulted where topsoil or vegetation are involved. Sites are surveyed prior to final determination of area to be disturbed. Clearing of vegetation is likely to be limited going forward given that the mine is now in operation.	Partially Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.12 Directly transfer stripped soil materials onto rehabilitation areas where practicable.		TGO are stockpiling stripped soil materials. Transferring the topsoil directly onto rehabilitation areas had not been possible during initial construction and operation of the site as rehabilitation has not commenced.	Compliant
	7.13 Undertake a program of weed control prior to soil stripping activities and following re-vegetation to ensure native plants are not overgrown during their early periods of growth.		TGO utilise external contractor to undertake routine weed control. Environmental personnel undertake a post weed control inspection to check effectiveness of program as per program outlined in procedure - records of inspections in register. Sighted Site Specific Procedure Weed Control 9 February 2015 and Weed Treatment Register, spray record from Ironbark Agribusiness showing date of weed control, target weeds and chemicals used and volumes. However staff advised that this Clause was not met during construction. <i>Recommendation 20: Modify soil stripping procedures spray for weeds prior to stripping.</i>	Partially Compliant
	7.14 Salvage tree trunks, major limbs and, if practicable, minor branches for use in rehabilitation of the Mine Site or amelioration areas		TGO undertook a re-snagging project with NSW Fisheries that saw approximately 120 logs put into the Macquarie River between Wellington and Dubbo. Sighted stockpiles of vegetation awaiting use in rehabilitation.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.15 Erect signs to notify of the location and significance of vegetation stockpiles.		Sighted sign posting of vegetation stockpiles during site inspection.	Compliant
	7.16 Implement an erosion and sediment control plan for all areas of disturbance likely to generate sediment or be subject to erosion.		Sighted ESCP and observed constructed onsite controls during site inspection.	Compliant
	7.17 Revegetate the Mine Site as described in Section 2.14 and in accordance with a MOP or REMP to be prepared prior to the commencement of activities on the Mine Site.		Refer to Schedule 3, Clauses 51 and 52.	Compliant
Avoid, minimise or mitigate impacts on native flora and fauna associated with residue management.	7.18 Ensure that the maximum WAD cyanide concentration reporting to the RSF is less than 30mg/L and the 90th percentile discharge limit is less than 20mg/L.	Ongoing	Refer to Schedule 3, Clause 37.	Compliant
	7.19 Manage the RSF without a central decant pond.		Operations personnel monitor the levels in the RSF during each shift, sighted Site Specific Procedures and completed RSF inspection forms (Refer to Clause 27). Levels are maintained to a minimum.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.20 Construct fencing using a combination of a large (tall >1.8m) chain mesh fence (to exclude large mammals) with a fine mesh skirt at its base (to exclude small mammals and reptiles).		Sighted constructed fencing surrounding RSF during site inspection.	Compliant
	7.21 Deter birds and arboreal mammals from landing on the standing water at the decant tower with appropriate fauna deterrents.		Sighted installed fauna fences and fauna deterrents such as reflective tape around the RSF.	Compliant
	7.22 Maintain alternative water sources in the vicinity of the Mine Site, including establishment of aquatic and edge species to attract bird species to these areas and away from any standing water within the RSF.		Sighted water bodies in the vicinity of the mine during site inspection and on aerial photography. TGO personnel indicated that they maintain them including establishing and maintaining edge species.	Compliant
	7.23 Monitor the concentration of WAD cyanide discharging to the RSF, the presence or otherwise of standing water on the surface of the facility and wildlife mortality, if any.		Monitoring is undertaken in accordance with site specific procedures and an inspection checklist (Refer to Clause 27). Records of monitoring results are maintained in the Water Monitoring TGO R1 spreadsheet, completed inspection checklists and Wildlife Monitoring Register.	Compliant
	7.24 Monitor fauna usage and/or mortality on or in the vicinity of the residue storage facility (in accordance with the recommendations of OzArk (2011a), and Section 4.5.7.3.4).		Refer to Clause 7.23. Record in register includes location of find and any results of a post mortem.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	7.25 Report to DECCW, investigate and implement additional measures in the event of unacceptable wildlife mortality.		TGO maintain records of animal mortalities on site in the Wildlife Register. Sighted records of two bird mortalities in the RSF to date, a Plumed Whistling Duck and a Teal (Female). These deaths were reported to the EPA, EPA report reference C05215-2014 and C18055-2014.	Compliant
Offset residual impacts on native flora and fauna.	7.26 Develop a biodiversity offset strategy, in consultation with DECCW, in accordance with the general strategy presented in Section 2.14.8 and Figure 2.19 (Modified). The biodiversity offset strategy should provide for the following. <ul style="list-style-type: none"> • Protection and conservation of existing remnants of Inland Grey Box – Poplar Box – White Cypress Pine tall woodland on red loams, Fuzzy Box – inland Grey Box on alluvial brown loam soils; and River Red Gum riverine woodland forest. An illustration of remnants to be protected and conserved is provided by Figure 2.19 (Modified). • enhancement, through protection, 	Within 12 months of receipt of project approval	Refer to Schedule 3, Clause 33.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	ameliorative revegetation and conservation of land adjacent to remnant native vegetation. An illustration of remnant vegetation to be protected, conserved and enhanced is provided by Figure 2.19 (Modified).			
	7.27 Establish legally binding arrangement over lands included in the biodiversity offset strategy to for conservation of the land in perpetuity. The arrangement would take the form of a Biobanking Statement Agreement, Conservation Agreement, Trust Agreement or Planning Agreement (through change in title of the affected land).	Within 18 months of receipt of project approval	TGO have developed a PVP in conjunction with LLS and OEH. Refer to Schedule 3, Clause 34.	Compliant
	7.28 Prepare a Biodiversity Offset Management Plan (BOMP). The BOMP would include the following components:		Refer to Schedule 3, Clause 34. The PVP addresses management actions, defines the area of offsets to be protected and security of the offsets. A conservation bond has been secured for the management of offset sites, refer to Schedule 3, Clause 37.	Compliant
	<ul style="list-style-type: none"> • A plan of management for the BOS detailing the biodiversity-related actions and management to be undertaken. 			
	<ul style="list-style-type: none"> • BioBanking Credit Report(s) to define the quantum of the BOS. • Details of how the land will be secured in 			

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	perpetuity. • Details of how the BOS will be funded.			
	7.29 Develop a pest animal strategy in conjunction with relevant government agencies and surrounding landholders to manage introduced fox, rabbit, hare and feral cat.	Within 12 months of receipt of project approval	<p>TGO personnel indicated that there have been no significant populations of rabbits, hares or cats identified at the site to date. Foxes are spotted regularly. TGO are in consultation with adjoining land owners regarding their pest animal control programs.</p> <p>TGO monitor pest animals as part of site fauna monitoring, sighted report from Biodiversity and Rehabilitation Monitoring event that occurred in October 2014.</p> <p>However TGO have not developed a strategy or procedure for pest animal management and have not undertaken any control measures to date.</p> <p>Corrective Action 9: TGO to finalise consultation with adjoining landholders and prepare a Pest Animal Control Strategy as relevant to the known populations of pest animals on the mine site.</p>	Non Compliant
	7.30 Develop a weed control program to manage weed species within the Mine Site.	Within 12 months of receipt of project approval	Refer to Clause 7.13. Version 1 of procedure sighted dated 9 February 2015 which is outside the 12 month period required by Clause 7.30.	Non Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Rehabilitate disturbed areas in order to maintain biodiversity values of the Project Site.	7.31 Create a final landform more diverse and complex than the pre-mining landform, i.e. approximating the conceptual final landform provided by Figure 2.18.	Ongoing	Rehabilitation for the site is included in the MOP. This includes a landform that is more diverse and complex than the pre-mining landform. No rehabilitation has been undertaken to date to confirm if this is likely to be fulfilled.	Not Applicable
	7.32 Revegetate the final landform as nominated by Figure 2.18 (or MOP or REMP).	Ongoing	Mining is still ongoing and the final landform is yet to be constructed. No rehabilitation has been undertaken to date. TGO will prepare a closure plan as part of the final MOP.	Not Verified
Aboriginal heritage				
Impact on Site TGP – ST7 is undertaken in accordance with the requirements of the registered Aboriginal stakeholders.	<p>8.1 Remove the tree trunk and retain these on the Mine Site for community assessment/protection and possibly education. The exact location and procedure for scar removal and transfer will be included in a Cultural Heritage Management Plan, however, will likely involve the following.</p> <ul style="list-style-type: none"> • Hold a meeting involving the Proponent, the tree-removing contractor, Aboriginal community representatives and an archaeologist to confirm the tree-removal methods. • Remove the tree carefully in two portions using a chainsaw below the base of the carving and transport the removed section 	Prior to disturbance of Site TGP-ST10 (probably meant to be TGP - ST7)	<p>This audit was undertaken during mine operation. Construction requirements could not be verified.</p> <p>Sighted scar trees retained on site during site inspection. The CHMP does not include the measures in Clause 8.1 to remove scar trees during construction.</p>	Not Verified

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	<p>to an appropriate keeping place.</p> <ul style="list-style-type: none"> • Transfer the scarred section to the nominated keeping place. 			
Impact on Site TGP – ST10 is minimised and undertaken in accordance with the requirements of the registered Aboriginal stakeholders.	<p>8.2 Remove the scarred section of the tree and transfer to an appropriate keeping place in accordance with the wishes of the registered Aboriginal stakeholders. The exact location and procedure for scar removal and transfer will be included in a Cultural Heritage Management Plan, however, will likely involve the following.</p> <ul style="list-style-type: none"> • Hold a meeting involving the Proponent, the tree-removing contractor, Aboriginal community representatives and an archaeologist to confirm the tree-removal methods. • Remove the tree using a chainsaw below the base of the carving and transport the removed section to an appropriate keeping place. • Transfer the scarred section to the nominated keeping place. 	Prior to disturbance of Site TGP-ST10	Refer to Clause 8.1. Sighted letters to Little Burning Mountain Aboriginal Corporation, Narromine Local Aboriginal Land Council, Peak Hill Local Aboriginal Land Council, all dated 19 September 2013 inviting them to be present for the removal of ST10.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Impact on Site TNWP – OS1 with PAD is minimised and undertaken in accordance with the requirements of the registered Aboriginal stakeholders.	8.3 Invite representatives of the Aboriginal community to be in attendance to monitor the excavation and to retrieve any Aboriginal artefacts.	During construction	Sighted letter from Phil Cameron, OzArk to Collean Measday, TGO regarding correspondence with local Aboriginal groups as part of development of the CHMP. Sighted Community Engagement Protocol between Alkane Resources and Peak Hill Wiradjuri dated 15 June 2010.	Compliant
	8.4 Confine cars and machinery, to the extent practicable, to an existing dirt road when in the vicinity of TNWP-OS1 with PAD.	During construction	Could not be verified at audit.	Not Verified
	8.5 Cease construction, notify OEH and obtain advice as to how to proceed should in excess of 100 artefacts be identified.	As necessary	Staff advised that no additional artefacts were identified during the site's construction.	Not Applicable
	8.6 Cease all work and notify local police should human skeletal material be noticed. If the skeletal remains are deemed to be historical, OEH and the Narromine LALC would be contacted to determine how to proceed.	As required	Staff advised that no human skeletal material were identified during construction of the project.	Not Applicable

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Impact on Site TGP – OS2 is minimised and undertaken in accordance with the requirements of the registered Aboriginal stakeholders.	8.7 Place geofabric directly on the ground within the disturbance footprint of the Main Site Access Road in the vicinity of Site TGP-OS2 prior to ground disturbing activities commencing. Cover this with or sand or gravel before constructing the base of the Main Site Access Road.	Prior to commencement of mining operations	The site access road location was altered to avoid TGP-OS2. Sighted letter from Collean Measday, TGO to OzArk re: Tomingley West Rd alignment.	Not Applicable
	8.8 Plant by hand native vegetation adjacent to the Main Site Access Road in the vicinity of Site TGPOS2 to prevent vehicular access to other sections of the site.		Sighted tree planting at access to site during site inspection. This area has been fenced and sign posted.	Compliant
	8.9 Fence and mark the area of Site TGP-OS1 to prevent inadvertent disturbance of the site.		Sighted during site inspection. Area adjacent to Tomingley West Rd. Fenced and sign posted.	Compliant
	8.10 Fence around the drip lines of Sites TGP-ST8 and TGP-ST9 to prevent inadvertent disturbance of these sites.		These sites are outside the mine boundary, adjacent to Wyoming 1. Not sighted during site inspection.	Not Verified
Impact on remaining sites of the Mine Site avoided.	8.11 Ensure that all identified sites are identified on plans held by the Mine Planning and Environmental Officers.	Prior to commencement of mining operations	Sighted TGP Heritage Report October 2009 by OzArk for Environmental Assessment.	Compliant
	8.12 Ensure that all ground disturbing activities do not disturb the identified sites.	Ongoing	Sign posting and fencing of identified sites sighted at site inspection.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	8.13 Construct, where required, appropriate fencing or other identifying markers around identified sites where those sites occur in the vicinity of areas of proposed disturbance or in areas where inadvertent disturbance may occur.	Prior to commencement of mining operations	Sighted during site inspection. Refer to Clause 8.12.	Compliant
	8.14 Prepare, in consultation with the Aboriginal community, a Cultural Heritage Management Plan identifying procedures to protect or salvage all identified Aboriginal sites and prevent damage to all sites that may be identified during the life of the Project.	Within 6 months of receiving project approval	Sighted CHMP, prepared October 2012, within the required timeframe. Does not include procedures to salvage identified artefacts. Refer to Schedule 3, Clause 39.	Partially Compliant
Impact on sites identified along the alignment of the TNWP are minimised and undertaken in accordance with the requirements of the registered Aboriginal stakeholders.	8.15 Mark all identified scarred trees with high visibility fencing at a suitable distance from the tree prior to construction of the pipeline commencing to prevent inadvertent disturbance of the trees	Prior to construction of the pipeline commencing	Sighted Project Environmental Induction for the Water Pipeline Construction that advised staff to flag or fence identified scar trees to avoid inadvertent impact.	Compliant
	8.16 Ensure all disturbance remains within the nominated TNWP corridor and that the minimum area required for installation of the pipeline is disturbed.	During construction	This audit was undertaken during mine operation. Construction requirements could not be verified.	Not Verified.

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	8.17 Any soil excavated for the water pipeline would be replaced in the area and not removed to some other location.		This audit was undertaken during mine operation. Construction requirements could not be verified.	Not Verified.
Maintain Aboriginal heritage values on site.	8.18 In the event the disturbance footprint changes, ensure that appropriate consultation and field survey is undertaken to confirm no sites or objects of Aboriginal heritage significance are impacted.	If the disturbance footprint changes	No notable changes in footprint.	Compliant.
	8.19 Ensure work in an area is suspended should any Aboriginal sites be uncovered. The OEH Western Regional Archaeologist (Dubbo Office) and local Aboriginal community will be contacted to discuss how to proceed.	If a previously unidentified object or Aboriginal site is uncovered	TGO personnel advised that no unexpected finds were discovered during construction of the site.	Not Applicable
Non aboriginal heritage				
Site activities are undertaken to minimise impacts on non-Aboriginal heritage items.	9.1 Identify all identified sites on mine plans and ensure that activities in the vicinity of those sites are appropriately managed.	Prior to the commencement of site establishment operations.	TGO personnel advised that there are no sites of non-Aboriginal heritage within the mining area. All items of cultural heritage are detailed in the CHMP.	Compliant
	9.1 Protect and erect appropriate signage around sites TGP-HS1, TGP-HS2 and TGP-HS3.		Sighted Project Environmental Induction for the Water Pipeline Construction that advised staff to fence these sites to avoid inadvertent impact. Sighted signage for heritage items during site inspection.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	9.2 Mark sites TNWP-HS1 and TNWP-HS2 with high visibility fencing at a suitable distance from the tree.	Prior to construction of the pipeline	TGO were not able to provide documentation to verify compliance with this clause at audit.	Not Verified
	9.3 Document the site TGP-HS5, by photography, prior to removal of the artefacts. Discussions would be held with local historic society as to the potential use of these items in a display to document the history of the site.	Prior to disturbance to site TGP-HS5	CHMP states that the site has been recorded (photographed). There is no available record of discussion with historical society regarding use of the items in a display.	Compliant
	9.4 Undertake an assessment and archaeological investigation of site TGP-HS6 in accordance with the Historical Archaeology Code of Practice, published by the Heritage Office (of the then Department of Planning) (2006) and the Australia ICOMOS Burra Charter as 'good heritage practice'.	Prior to disturbance to site TGP-HS6	CHMP states that test excavation has been undertaken at this site and that it was determined to be of little to no historical significance and that no further assessment or recording was warranted.	Compliant
Visual amenity				
Limit the visibility of operational areas from nearby residences and the Newell Highway.	10.1 Construct vegetated amenity bunds as nominated on Figure 2.5 and 2.6 as follows. <ul style="list-style-type: none"> • Adjacent to the eastern and western boundary of the Newell Highway. • To the north of the Caloma Open Cut. • To the south of the Wyoming One Open 	Within the initial 12 months of operations	Sighted constructed vegetated amenity bunds during site inspection.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	Cut. <ul style="list-style-type: none"> to the north of Waste Rock Emplacement 2. 			
	10.2 Construct and rehabilitate the northern faces of Waste Rock Emplacements 2 and 3 to an initial height of 15m above the remainder of the waste rock emplacement.	Continuous for the life of the Project	TGO personnel indicated that this clause is under review as part of the Modification 3 to the project approval. There are concerns regarding the geotechnical feasibility of this proposal given the spatial constraints of the site.	Not Verified
	10.3 Progressively reshape and rehabilitate areas, including waste rock emplacements, no longer required for mining related purposes.		No rehabilitation has been undertaken to date.	Not Verified
	10.4 Undertake remnant vegetation protection and enhancement as described in Section 2.14.8, including ameliorative tree plantings to the south of Tomingley (Figure 2.19).		Sighted revegetation, remnant protection and enhancement during site inspection.	Compliant
	10.5 Construct the processing plant and other infrastructure within the Mine Site from nonreflective, neutral coloured material.	During the site establishment phase	Sighted construction of administration building and process plant from nonreflective materials during site inspection.	Compliant
	10.6 Place and operate lighting on the Mine Site that: <ul style="list-style-type: none"> are not directed towards, and therefore do not impact on the vision of motorists using, the Newell Highway; 	Continuous for the life of the Project	Refer to Schedule 3, Clause 45.	

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	<ul style="list-style-type: none"> do not point towards surrounding residences; and minimise the 'loom' created by the lights. 			
	10.7 Provide for additional visual screening in response to reasonable and feasible request from surrounding land holders.	As required	Refer to Schedule 3, Clause 45.	
	10.8 Maintain the Mine Site in a clean and tidy condition at all times.	Continuous for the life of the Project	Mine site was presented in a clean and tidy condition at the time of audit.	Compliant
	10.9 Implement commitments related to air emissions management.		Refer to SOC Clause 11 below.	
Air quality				
Minimise impacts to air quality relating to the Project.	11.1 Disturb only the minimum area necessary for mining.	Ongoing	<p>Only stripped in contained area, and all stripping is staged.</p> <p>All proposed stripping is signed off by mine engineer, superintendent, mine manager and environmental manager. Sighted WRE2 strip plan Approved 3/3/2015.</p>	Compliant
	11.2 Shape, topsoil and rehabilitate completed sections of the waste rock emplacements as soon as practicable.	Ongoing	<p>TGO are about to commence the first lot of rehabilitation (1st week of April). Currently behind schedule but plan to catch up by the end of May depending on rainfall.</p> <p>Sighted email from Mark Williams on 4</p>	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			March 2015 outlining plans for WRE2.	
	11.3 Operate water carts to minimise wind-blown and traffic-generated dust.	Continuous for the life of the Project	Two water carts operated onsite. One 55,000L and one smaller 40,000L used as a backup and required.	Compliant
	11.4 Clearly mark all roads with marker posts or equivalent to control their locations, especially when crossing large overburden emplacement areas.	Ongoing	Markers are installed onsite to delineate areas where works or vehicles can access.	Compliant
	11.5 Rehabilitate all roads as soon as practicable once no longer required for mining-related purposes.	Continuous for the life of the Project	Rehabilitated roads were observed during the site inspection.	Compliant
	11.6 Limit development of minor roads as far as practicable.	Ongoing		
	11.7 Ensure that all appropriate dust management measures are used during drilling operations, including dust aprons, dust extraction and water injection.	Continuous for the life of the Project	Drilling not a significant source of dust onsite.	Not Applicable
	11.8 Undertake blasting operation in appropriate weather conditions only.	Ongoing	The pre-blast risk assessment considers weather conditions. Blasting is weather dependent, as per the BMP.	Compliant
	11.9 Ensure that adequate stemming is used during blasting operations.		Pre-blast checklist includes stemming checks and is appropriately signed off.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	11.10 Ensure that all conveyor transfer points within the crushing and screening circuit of the processing operations are enclosed.		Conveyor belt has been enclosed, this was observed at the audit.	Compliant
	11.11 Install and operate spray bars within the crushing and screening circuit of the processing operations to produce a fog of water to suppress dust. Points at which this control will be installed are as follows. <ul style="list-style-type: none"> • The ROM Bin back and side walls. • The mouth of the Primary Crusher. • The conveyor between the primary crusher and secondary crusher (CV01). • The discharge point to the Head Chute in the Screening Tower (CV02). • The inlet to the Screening Tower. • The oversize outlet to the Screening Tower. • Loading points to the conveyors for the transfer of screened material to and from the screening Tower and Surge Bin (CV03, CV04, CV05 and CV06). 		During the site inspection excessive dust was observed to be generated from the crushing and screening plant attributable to high winds and lack of screens surround the crushing plant. It was noted however that the main conveyor was covered in preference to spray bars to minimise impacts of the process. Corrective Action 10: Develop area specific dust controls for the crushing and screening circuit and associated conveyors.	Non Compliant
Monitor and manage dust emissions.	11.12 Prepare an Air Quality Monitoring Program for the Project.	Within 12 months of project approval	TGO have developed a Dust SSP and installed a TEOM & HVAS in Tomingley township, and DDG's surrounding site.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Blasting and vibration				
Minimise impacts from blasting on surrounding receptors and infrastructure.	12.1 Ensure that all blasts are designed by a suitably qualified and experienced blasting engineer or shotfirer and that each blast has an MIC of no greater than 68kg (unless more precise predictions of blast emissions are completed indicating compliance with air overpressure and ground vibration criteria at using larger MIC).	Continuous for the life of the Project	All blasts are designed by a suitably qualified staff. A more stringent approval process for blast plans was developed by TGO after an exceedance event. The new pre- blast checklist was observed during the audit which included appropriate signoff by the shot crew, observers and blast guards.	Compliant
	12.2 Ensure appropriate stemming and burden is provided for each blast hole to minimise the potential for fly rock.	Ongoing	The Blast pattern planning checklist V5 has appropriate stemming as a requirement. Sighted checklist from 2 March 2015.	Compliant
	12.3 Use aggregate for all stemming operations.		Refer to Clause 12.2.	Compliant
12.4 Ensure that fragmented material is directed away from the Newell Highway.			TGO advised that Newell Highway is closed during blasting. Recommendation 21: Amend the Blast Management Plan to state that “fragmented material is directed away from the Newell Highway”.	Partially Compliant
	12.5 Identify the blast envelope during design of each blast.		This is undertaken as per the Blast Management Plan. This was not verified during the audit.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	12.6 Inspect all blasts following initiation and any note the presence of fly rock outside the blast envelope. Where required, amend the blast design procedures to manage fly rock.		This is undertaken as per the Blast Management Plan. This was not verified during the audit.	Compliant
	12.7 Initiate blasts between the hours of 9:00am and 5:00pm Monday to Saturday only.		Blasting records are available on the company webpage in the monthly environmental reports. All blasts observed to take place after 9 am and before 5 pm.	Compliant
	12.8 Establish and maintain an environmental complaints line and register of complaints in accordance with the requirements of the Environment Protection Licence, once issued.		Complaints line up and running, referenced on website and also on community information boards.	Compliant
	12.9 Respond promptly to any issue of concern or complaint raised by the community or a government agency.		The Community Enquiry Database is readily available on the website however records in the database do not provide the level of information required to verify this clause.	Not verified
	12.10 Erect signage to advise local traffic of blasting operations.	Prior to first blast	This was not verified during the audit.	Not Verified
Traffic and transportation				
Achieve safe and efficient transport operations.	13.1 Develop and enforce a Code of Conduct for all drivers for all heavy vehicles that travel to and from the Mine Site regularly. The Code of Conduct would stipulate safe driving practices must be maintained at all times.	During site establishment operations	Drivers operate in accordance with the public road rules as well as on site safety requirements. TGO terms and conditions include a Performance of the Services clause that requires drivers to abide by all laws and regulations, requirements stipulated by TGO, safety health and	Partially Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
			<p>environment guidelines, and ensure that the premises are left in a clean, secure manner.</p> <p>TGO have not developed a separate code of conduct with their heavy vehicle drivers.</p> <p>Recommendation 22: Review the need to develop a code of conduct for heavy vehicle drivers.</p>	
	13.2 Investigate immediately any complaints received and substantiated incidents acted on decisively, which could include the banning the offending driver(s) from the Mine Site.	Continuous during	TGO personnel advised that there have been no complaints regarding drivers since mining operations commenced.	Compliant
	13.3 Widen the section of Tomingley West Road between the Main Site Access Road and Tomingley - Narromine Road to provide for two sealed lanes of at least 3m width.	the life of the Project	Sighted widened Tomingley West Road during site inspection.	Compliant
	13.4 Construct the Main Site Access Road intersection with Tomingley West Road in accordance with the RTA Road Design Guide for rural property access.	During site establishment phase (prior to commencement of mining)	Refer to Schedule 3, Clause 41.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	13.5 Undertake the following road upgrades on Tomingley West Road. • Provide for line marking of the road for a length of 1.6km with a broken central separation line.	Prior to commencement of mining	Sighted the road upgrades required by this clause at site inspection.	Compliant
	• Install guide posts for improved delineation of the road.			
	• Install additional guide posts at the culvert and “narrow bridge” signage on approach to the culvert.			
	13.6 Undertake a geotechnical investigation of pavement depths, materials and sub-grade conditions on Tomingley West Road and complete the modifications or strengthening works so required.	Prior to commencement of mining	No information was provided at audit to verify this clause.	Not Verified.
	13.7 Prepare an individual Traffic Control Plan for each over mass and over weight delivery.	As required	This audit was undertaken during mine operation. Construction requirements could not be verified. Emeco advised via email on 28 April 2015, that the transporting contractors used to transport over mass/weight deliveries to site prepare Traffic Management Plans as required by RMS and submit them directly to RMS, and they negotiate arrangements for the transport with RMS and the police.	Not verified
	13.8 Prepare and implement a comprehensive Transport Management Plan for construction and mine operation.	Prior to commencement of construction	Sighted Site Traffic Management Plan dated January 2014 with construction commencing at the same time.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Construct and Operate the Newell Highway underpass without adverse impact on regional traffic conditions.	13.9 Design and construct the Newell Highway underpass to meet the requirements of the Austroads "Guide to Road Design" and to the specifications presented in Section 2.4.2.2.	Prior to commencing construction of the Newell Highway underpass	Refer to Schedule 2, Clause 11.	Compliant
	13.10 Construct a temporary diversion of the Newell Highway in accordance with RTA requirements and to the specifications presented in Section 2.4.2.3.	During site establishment phase (prior to commencement of mining)	Refer to Schedule 2, Clause 11.	Compliant
	13.11 Reconstruct the Newell Highway over the underpass as described in Section 2.4.2.2 and to the required standard of the RTA.		Refer to Schedule 2, Clause 11.	Compliant
	13.12 Prepare, in consultation with the Roads and Traffic Authority, a Construction Road Traffic Management Plan.	Prior to commencing construction of the Newell Highway diversion	Refer to Schedule 3, Clause 44.	Compliant
Soils and land capability				
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion.	14.1 Strip soil material to the depths no more than those identified in Table 4.60.	Ongoing	Table 4.60 allows for stripping depths of 300mm for topsoil and 300mm for subsoil. Sighted Proposed Topsoil Stripping and Stockpile areas figure, Stripping Surface figure which includes stripping methodology and requires sign off by Environment Manager, TGO topsoil surface area strip map including stockpile locations.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	14.2 Ensure that soil materials are not stripped when in either an excessively dry or wet condition.		Sighted COA for soil test ES1423445 23 October 2014, taken prior to stripping that includes soil moisture content result.	Compliant
	14.3 Grade or push soil into windrows using graders or bulldozers for later collection by elevating scrapers or loading into trucks by front-end loaders to minimise compaction of soil materials, where practicable.		Sighted windrows during site inspection. Sighted requirement for construction of windrows in stripping methodology.	Compliant
	14.4 Use soil materials immediately following stripping in areas undergoing progressive rehabilitation, where practicable. Where this is not practicable place soil transported by truck directly into storage or place soil transported by scrapers in thick "lifts" to minimise compaction.		Stripped soil has been stockpiled through direct deposition; stockpiles are then shaped and seeded. Sighted during site inspection sign posting of stockpiles that not to be driven over. However no rehabilitation has taken place at site to date.	Compliant
	14.5 Minimise, as far as practicable, the operation of machinery on soil stockpiles to reduce compaction.		Refer to Clause 14.4.	Compliant
	14.6 Ensure that soil stockpiles have a maximum height of 5m (3m of subsoil and 2m of topsoil).		This condition is included in the MOP.	Compliant
	14.7 Leave the surface of the soil stockpile with an even but roughened surface to assist in erosion control and seed germination and emergence.		A contractor is engaged to seed stockpiles via direct drilling, this method leaves a roughened surface. However TGO have not documented this requirement into a procedure.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	14.8 Establish an appropriate vegetative cover on all soil stockpiles to be retained for more than 3 months.	Ongoing	Sighted during site inspection.	Compliant
	14.9 Assess soil stockpiles prior to resspreading for weed infestation and spray of otherwise treat as required.	Six monthly	No resspreading has occurred to date. Refer to Clause 7.13.	Compliant
	14.10 Consider and assess the requirements for soil additives such as gypsum prior to commencing resspreading operations.	Ongoing	TGO are applying soil additives, gypsum and lime as part of rehabilitation activities. Sighted email from Rod Masters SLR to Mark Williams TGO 24 April 2014 recommending soil additives and volumes. These recommendations are documented in Section 2.3.2 of the MOP.	Compliant
	14.11 Spread soil materials at least 200mm thick on the shaped landform during rehabilitation operations.	During rehabilitation operations	The MOP includes requirements for topsoil depths unless otherwise verified by trial. TGO are currently undertaking a trial of 150mm depth.	Compliant
Create a final landform that is safe, stable and is amenable to a combination of agricultural and native flora/fauna conservation activities.	14.12 Maintain a soil inventory: <ul style="list-style-type: none"> • to ensure appropriate volumes of different soil units are stripped consistently with the soil requirements of the final landform. • to identify the age of various soil stockpiles on the Mine Site and therefore 	Ongoing	TGO maintain a topsoil inventory via the sighted topsoil tracker spreadsheet with entries up to 26 February 2015, which includes stockpile sizes and includes topsoil and subsoil. Also sighted Haul Rd South 2 report that included site plan and	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	assist in minimising the length of time soils remained stockpiled.		verification of volumes dated 10 December 2013.	
	<ul style="list-style-type: none"> to assist the Proponent in using the most appropriate soils for the different elements of the final landform. 		The TGO site consists of red dermosol and sodic dermosol soils, personnel advised that the sodic dermosol is not stockpiled or reused. TGO personnel advised that all stockpiles were constructed at the approximately the same time therefore stockpiles to be used in rehabilitation would be selected based on proximity to the rehabilitation site.	
	14.13 Ensure that the land capability of those sections of the final landform to be used for agricultural purposes is similar to the current land capability. Any agricultural land that forms part of the final landform will be more heavily treed than it is at present due to proposed biodiversity and screen plantings.	Rehabilitation phase	The MOP includes an agricultural land use in the final landform with land class 1-7. This is to be assessed using Landscape Function Analysis and soil physical and chemical analysis with criteria for a range of parameters.	Compliant
Hazardous Materials Management				
Prevent contamination of the surrounding environment.	15.1 Store sodium cyanide and other toxic chemicals in accordance with the requirements of as/nzs 4452 - the storage and handling of toxic substances.	Ongoing	Sighted Tomingley Full Sparge Operating Procedure RevB 20 January 2014.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Manage the transport, storage and use of all reagents on the Mine Site.	15.2 Prepare a reagent management plan (RMP) identifying all hazardous reagents to be used on the mine site. the RMP will identify the measures to be implemented to ensure the appropriate transportation, handling, storage and use of this material	Prior to the acceptance and storage of chemical reagents onto the Mine Site	Hazardous materials management plan developed and covers all materials utilised on site. Chemical approval process to bring chemicals to site. Liquid oxygen not included as new product on site.	Compliant
	15.3 Transport dangerous goods in accordance with the requirements of the "Australian Code for the Transport of Dangerous Goods by Road and Rail - Current Edition".	Ongoing	Sighted Tomingley Mine Site, Sodium Cyanide, Transport Hazard Analysis (HIPAP 11): Fletchers Rail Terminal to Tomingley West Rd 29 April 2014 prepared to address this clause. This THA includes a route specific transport risk assessment.	Compliant
Confirm no land contamination in the final landform as a result of hazardous materials management.	15.4 Sample soil and subsoil from beneath the surface infrastructure where potentially polluting chemical reagents are stored or used for evidence of hydrocarbon, salinity or other chemical contamination.	Prior to creation of the final landform and rehabilitation of the Mine Site	The mine is still operational, hence this requirement has not been undertaken. This requirement should be included in a Closure Plan.	Not Applicable
Waste				
Manage waste appropriately on the Mine Site.	16.1 Maintain a register of the types and quantities of wastes produced on the project site.	Ongoing	TGO contract JR Richards to manage the majority of their waste removal from site. Sighted Waste Register that is included in Monthly Waste Reports (Refer to Schedule 3 Clause 49), this includes mainly hydrocarbon waste, mixed general waste and recyclables.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	16.2 Design and maintain storage areas to contain spillages.		Sighted concrete bunded chemical storage areas at audit, segregated waste / recyclables behind maintenance shed, and various mixed general waste and recyclable waste receptacles around the site.	Compliant
	16.3 Segregate and retain recyclable and non-recyclable waste in designated storage areas prior to removal from the project site.		As per Clause 16.2.	Compliant
	16.4 Keep the project site in a clean and tidy condition.		Site was found to be in a clean and tidy condition during the site inspection.	Compliant
	16.5 Ensure waste is regularly removed from the project site by a licensed contractor.		Refer to Clause 16.1. Sighted monthly Waste Register provided to TGO by JR Richards, shows regular removal of wastes from site.	Compliant
	16.6 Dispose of tyres to a licensed waste management facility or a third party approved to recycle tyres.		No information on disposal of waste tyres was provided at the audit. Light vehicle maintenance occurs offsite.	Not Verified
Socio economic setting				
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Mine Site.	17.1 Engage the community surrounding the project in regular dialogue in relation to the proposed and ongoing operation of the project and maintain an "open door" policy for any member of the community who wishes to discuss any aspect of the project.	Ongoing	TGO have demonstrated that they engage with the local community in a variety of ways including the CCC, letterbox drops, newsletters, newspaper advertisements and their website.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	17.2 Proactively and regularly consult with those residents most likely to be adversely impacted by the project.		Refer to Clause 17.1. Sighted various correspondence to residents (as reported throughout the audit report) regarding various aspects of the construction and operation of the mine site. During the audit M. Williams phoned an affected resident to confirm that she would be happy for an asbestos contractor to inspect her property prior to the installation of acoustic treatments.	Compliant
	17.3 Continue to support community organisations, groups and events, as appropriate, and review any request by a community organisation for support or assistance throughout the life of the Project.		Refer to Schedule 2 Clause 14.	Compliant
	17.4 Advertise and maintain a community complaints telephone line.	Continuous for the life of the Project	Refer to Schedule 5 Clause 1.	Compliant
	17.5 Make available excess water from the water supply bores and pipeline to Narromine Shire Council for supply to the residents of Tomingley.	As feasible	The raw water pipeline has been designed to allow for supply of excess water to the residents of Tomingley. No excess water has been available for provision to the township to date.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	17.6 Ensure that infrastructure and services installed for the Project, including the water supply bores and pipeline, electricity transmission line, appropriate buildings and hardstand areas, remain available for alternative uses following completion of the Project, provided that such uses are consistent with the final land uses identified in this document or any subsequent approval.	Post-mining	The Second MOP does include a final landform for the infrastructure domain where items are likely to be retained following the cessation of mining, these include site roads and the raw water pipeline.	Compliant
	17.7 Prepare and implement a voluntary planning agreement with Narromine shire council to provide for contributions to the affected community (and wider LGA) commensurate with the level of impact.	On receipt of project approval	Refer to Schedule 2 Clause 14.	Compliant
Consultation				
Maintain ongoing consultation with the local community and Council.	18.1 Form and maintain a Community Consultative Committee (CCC), including representative members of the community and Narromine Shire Council.	Within 6 months of receipt of project approval	Refer to Schedule 5 Clause 6. However CCC was not established within six months of receipt of project approval. Project approval received 24 July 2012 and first CCC meeting was held in May 2013.	Partially Compliant
	18.2 Regularly brief the CCC on activities within the Mine Site and seek feedback in relation to Project related impacts whether real or perceived.	Quarterly	The CCC meet quarterly and are briefed on mine activities as sighted in minutes from 13 November 2014 and 13 February 2014 which included a line item for operations updates.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Respond to environmental complaints.	18.3 Establish and maintain an environmental complaints line and register of complaints in accordance with the requirements of the Environment Protection Licence, once issued.	Within 6 months of receipt of project approval	Refer to Schedule 5 Clause 1. Sighted email from TGO to Narromine News re: ad 27 June 2014 advertising community complaints line. At the time of the audit, the date of establishment of the complaints line was not determined.	Compliant
	18.4 Respond promptly to any issue of concern or complaint raised by the community or a government agency.	Ongoing	Refer to Schedule 5 Clause 1.	Compliant
Environmental Monitoring				
Implement a comprehensive and ongoing surface water monitoring program.	19.1 Monitor surface water quality at Sampling Points 1 and 2 for: <ul style="list-style-type: none"> • Dissolved oxygen (% saturation); • pH or Acidity; • Total Suspended Solids or Turbidity (NTU); • Total phosphorus (mg/L); • Total nitrogen (mg/L); and • Electrical conductivity (mS/cm). 	After rainfall events which result in local flow within Gundong Creek	Refer to EPL Clause M2 for monitoring requirements, and Schedule 3 Clause 32 (b).	Compliant
	19.2 identical to 19.1			

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	19.3 Monitor surface water quality within sediment basin 2 for: <ul style="list-style-type: none"> • Dissolved oxygen (% saturation); • pH or Acidity; • Total Suspended Solids or Turbidity (NTU); • Total phosphorus (mg/L); • Total nitrogen (mg/L); • Electrical conductivity (mS/cm); • WAD Cyanide (mg/L); and • Total Cyanide (mg/L). 	Quarterly once the residue storage facility is in use	TGO are not monitoring the sediment basins on a quarterly basis as per the requirement of clause 19.3, however they are monitoring in conformance with their EPL. The EPL requires monitoring during discharge events only which conflicts with this requirement. Also, the draft WMP, ESCP and blue book require sediment basins to be emptied within 5 days of rainfall events which would make this clause difficult to adhere to. <i>Recommendation 23: Amend the SOC to make the surface water monitoring requirements in the SOC consistent with the EPL.</i>	Partially Compliant
	19.4 Monitor the quality of the residue discharge for: <ul style="list-style-type: none"> • pH or Acidity; • WAD Cyanide (mg/L); and • Total Cyanide (mg/L). 	Daily Monthly	Sighted sampling results from discharge point into the RSF and decant water as per EPL. EPL requires monitoring from both locations but only the discharge point into the RSF has a requirement for monitoring and that is only for WAD cyanide. Sighted spreadsheet TGO WAD CN data sent to Ady Watson which includes pH and WAD cyanide.	Compliant
Implement a comprehensive and ongoing groundwater monitoring program.	19.5 Monitor standing water levels within groundwater bores WYMB01, WYMB03 and WYMB06.	Quarterly	Contractor engaged (Carbon Based Environmental) Refer to Clause 32 c of Schedule 2.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	<p>19.6 Install and monitor shallow piezometers around the RSF (in accordance with the plan provided by Drawing 174-11-001 rev.0) and monitor for:</p> <ul style="list-style-type: none"> • pH or Acidity; • Electrical conductivity (mS/cm); • Total and WAD Cyanide (mg/L); and • A suite of other analytes to be confirmed in consultation with the EPA. 	<p>Prior to commencement of residue discharge and then quarterly</p>	<p>Sighted results from monitoring of these piezometers COA from May 2014 ES1411915 which included monitoring for all of the parameters in this clause. These monitoring points are monitored for parameters consisted with other EPL monitoring locations. No direct dialogue with the EPA regarding monitoring requirements.</p>	<p>Compliant</p>
	<p>19.7 Continue monitoring the shallow piezometers around the RSF until release of the rehabilitation security held for the RSF component of the mining lease by the Division of Resources & Energy (of the Department of Trade & Investment; Regional Infrastructure & Services).</p>	<p>Prior to commencement of residue discharge and then quarterly until release of relevant rehabilitation security</p>	<p>Refer to previous clauses 6.10 and 19.6 for information on the RSF piezometer monitoring.</p> <p>However TGO personnel advised that piezometers were installed shortly after commencement of residue discharge into the RSF.</p>	<p>Partially Compliant</p>

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
Implementation of an appropriate noise monitoring program to ensure continuing compliance with DECCW guideline levels.	<p>19.8 Prepare and implement a Noise Management Plan which would include the following.</p> <ul style="list-style-type: none"> • Real-time noise monitoring procedures and trigger levels. • Weather station monitoring procedures and adverse weather trigger levels. • Routine and complaint-driven attended noise monitoring procedures. • Reporting procedures, including reporting to relevant government agencies and the surrounding community. 	Within 3 months of project approval	Refer to schedule 3 clause 5 F.	
	19.9 Monitor ground vibration and air overpressure at the residences closets to the Mine Site.	Every blast.	Refer to schedule 3 clause 7.	
Implementation of an appropriate air quality monitoring program to ensure continuing compliance with DECCW guideline levels.	<p>19.10 Establish dust deposition gauges at residences surrounding the Mine Site. Residences to be chosen from include:</p> <ul style="list-style-type: none"> • Residence R3. • Residence R28. • Residence R29. • Residence R32. • Residence R33. • Residence R40. 	Ongoing	DDGs have been established in accordance with the AQGGMP.	Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	19.11 Establish PM10 continuous monitoring stations at selected locations surrounding the Mine Site.		A PM ₁₀ continuous monitoring stations has been installed at 40 Myall street, Tomingley. The TEOM is installed and operational in accordance with the Air Quality and Greenhouse Gas Management Plan.	Compliant
	19.12 Establish and operate a meteorological station on the Mine Site.		Meteorological station is installed and operating	Compliant
Environmental Management System				
A systematic set of documents are in place to guide the planning and implementation of all environmental management strategies.	20.1 Incorporate the environmental procedures in an onsite management system.	Prior to relevant activity	Environmental management strategy constitutes the site's Environmental Management System. This strategy incorporates the suite of management plans for the site. First version September 2012 which is prior to the commencement of mining in January 2014.	Compliant
	20.1 Prepare the following management and monitoring plans; <ul style="list-style-type: none"> • Mining Operations Plan • Cultural Heritage Management Plan • Water Management Plan, incorporating: – Erosion & Sediment Control Plan 	Various and as nominated by project approval	Sighted the management plans required by this Clause including second MOP, CHMP, NMP, AQGGMP, PVP and Biodiversity Management Plan. However the WMP is yet to be finalised and submitted to the DG for approval.	Partially Compliant

Statement of Commitments				
Desired Outcome	Action	Timing	Audit Findings	Compliance
	<ul style="list-style-type: none"> - Surface Water Monitoring Plan - Groundwater Monitoring Plan - Groundwater Contingency Plan • Noise Management Program • Air Quality Monitoring Program • Biodiversity Offset Management Plan 		Refer to Corrective Action 5	
	20.2 Incorporate relevant environmental data / information in Annual Environmental Management Reports.	Annually	Sighted 2013 AEMR which included a range of environmental data. 2014 AEMR is still under preparation.	Compliant

Table 10 Environment Protection Licence

1 Administrative Conditions	Compliance	Audit Findings												
A1 What the licence authorises and regulates														
A1.1 This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2:	Compliant	TGO project approval allows them to mine 1.5 million tonnes per annum, this is within the classification and scale identified in A1.2. Refer to Schedule 2 Clause 5. Sighted constructed and operational processing plant, RSF and ancillary infrastructure during site inspection.												
Initial site works: Establishment of processing plant, tailings storage facility and ancillary infrastructure including water pipeline, internal roads, offices and workshops.														
A1.2 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.														
<table border="1"> <thead> <tr> <th>Scheduled Activity</th> <th>Fee Based Activity</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>Crushing, Grinding or Separating</td> <td>Crushing, grinding or separating</td> <td>> 500000 - 2000000 T processed</td> </tr> <tr> <td>Mineral Processing</td> <td>Mineral processing</td> <td>> 500000 - 2000000 T processed</td> </tr> <tr> <td>Mining for Minerals</td> <td>Mining for minerals</td> <td>> 500000 - 2000000 T produced</td> </tr> </tbody> </table>			Scheduled Activity	Fee Based Activity	Scale	Crushing, Grinding or Separating	Crushing, grinding or separating	> 500000 - 2000000 T processed	Mineral Processing	Mineral processing	> 500000 - 2000000 T processed	Mining for Minerals	Mining for minerals	> 500000 - 2000000 T produced
Scheduled Activity	Fee Based Activity	Scale												
Crushing, Grinding or Separating	Crushing, grinding or separating	> 500000 - 2000000 T processed												
Mineral Processing	Mineral processing	> 500000 - 2000000 T processed												
Mining for Minerals	Mining for minerals	> 500000 - 2000000 T produced												
A2 Premises or plant to which this licence applies	Compliant	Tomingley West Rd is the location where the audit was conducted, these are the premises on which Alkane Resources are conducting the												
A2.1 The licence applies to the following premises:														

1 Administrative Conditions	Compliance	Audit Findings						
<table border="1"> <tr> <td>Premises Details</td> </tr> <tr> <td>TOMINGLEY GOLD MINE</td> </tr> <tr> <td>TOMINGLEY WEST ROAD</td> </tr> <tr> <td>TOMINGLEY</td> </tr> <tr> <td>NSW 2869</td> </tr> <tr> <td>PART LOT 1 DP 254193, LOT 103 DP 755110, LOT 104 DP 755110, LOT 105 DP 755110, LOT 112 DP 755110, PART LOT 122 DP 755110, LOT 160 DP 755110, LOT 161 DP 755110, LOT 162 DP 755110, LOT 163 DP 755110, LOT 1 DP 1151198, PART LOT 2 DP 1151198, PART LOT 3 DP 1151198</td> </tr> </table>	Premises Details	TOMINGLEY GOLD MINE	TOMINGLEY WEST ROAD	TOMINGLEY	NSW 2869	PART LOT 1 DP 254193, LOT 103 DP 755110, LOT 104 DP 755110, LOT 105 DP 755110, LOT 112 DP 755110, PART LOT 122 DP 755110, LOT 160 DP 755110, LOT 161 DP 755110, LOT 162 DP 755110, LOT 163 DP 755110, LOT 1 DP 1151198, PART LOT 2 DP 1151198, PART LOT 3 DP 1151198		Tomingley Gold Operations.
Premises Details								
TOMINGLEY GOLD MINE								
TOMINGLEY WEST ROAD								
TOMINGLEY								
NSW 2869								
PART LOT 1 DP 254193, LOT 103 DP 755110, LOT 104 DP 755110, LOT 105 DP 755110, LOT 112 DP 755110, PART LOT 122 DP 755110, LOT 160 DP 755110, LOT 161 DP 755110, LOT 162 DP 755110, LOT 163 DP 755110, LOT 1 DP 1151198, PART LOT 2 DP 1151198, PART LOT 3 DP 1151198								
A3 Information supplied to the EPA								
<p>A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1988; and</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Compliant	All activities sighted relate to the mining and processing of gold.						
2 Discharges to Air and Water and Applications to Land								
<p>P1 Location of monitoring/discharge points and areas</p> <p>P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</p>	Compliant	TGO maintain the monitoring locations listed in the EPL including meteorological weather station (Refer to Schedule 3 Clause 20), surface and groundwater monitoring locations (Refer to Schedule 3 Clause 32). There are no utilisation areas listed in the EPL.						

1 Administrative Conditions				Compliance	Audit Findings
<i>Air</i>					
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description		
1	Meteorological Weather Station		Onsite Tomingley Gold Operations		
<p>P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</p>					
<p>P1.3 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.</p>					
<p>P1.4 Note: The monitoring requirements may be modified by the EPA subject to ongoing review of licence conditions and monitoring results.</p>					
3 Limit Conditions					
L1 Pollution of waters				Not Verified	Refer to Schedule 3, Clause 23.
<p>L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.</p>					
L2 Concentration limits				Non Compliant	TGO have monitored the locations and parameters required by the EPL against the concentration limits specified in the EPL. However there have been a number of instances of breaches of the EPL criteria have occurred as follows: A selection of parameters were not measured at groundwater monitoring locations, sighted TGO groundwater spreadsheet. Licence breaches were reported in the EPA annual return. There were initially some issues with the site's groundwater sampling procedures, TGO have since engaged a contractor to monitor site groundwater in accordance with the EPL, and are currently drafting a groundwater sampling procedure.
<p>L2.1 For each monitoring/discharge point or utilisation area specified in the table(s) below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.</p>					

1 Administrative Conditions	Compliance	Audit Findings								
L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.		<p>A discharge occurred on one occasion through monitoring point 5, sighted COA ES1412294 dated 1 June 2014. Refer to Schedule 3, Clause 23.</p> <p>The TEOM was offline on the 5 November and 26 December 2013. There were procedural issues with the contractor engaged to maintain the HiVol system which resulted in no records for the following dates 2, 3 and 12 June 2014, and 17 and 23 August 2014. Neither of these breaches were reported in the EPA annual return.</p> <p>EPL 20169 has a 100 percentile concentration limit for pH. There has been only one sampling event (1 June 2014) and on this occasion, pH was within the criteria.</p> <p>Refer to Corrective Action 2, Recommendation 5 and 22.</p>								
L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.										
L2.4 Water and/or Land Concentration Limits										
L3 Waste										
L3.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.	Compliant	Refer to Schedule 3, Clause 49.								
<p>Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.</p> <p>This condition does not limit any other conditions in this licence.</p>										
<table border="1"> <thead> <tr> <th data-bbox="159 1064 226 1086">Code</th> <th data-bbox="248 1064 315 1086">Waste</th> <th data-bbox="450 1064 539 1086">Description</th> <th data-bbox="640 1064 707 1086">Activity</th> <th data-bbox="842 1064 931 1086">Other Limits</th> </tr> </thead> <tbody> <tr> <td data-bbox="159 1091 203 1114">NA</td> <td data-bbox="248 1091 394 1145">General or Specific exempted waste</td> <td data-bbox="450 1091 629 1305">Waste that meets all the conditions of a Resource Recovery Exemption under clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005</td> <td data-bbox="640 1091 786 1177">As specified in each particular resource recovery exemption</td> <td data-bbox="842 1091 875 1114">NA</td> </tr> </tbody> </table>	Code	Waste	Description	Activity	Other Limits	NA	General or Specific exempted waste	Waste that meets all the conditions of a Resource Recovery Exemption under clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA
Code	Waste	Description	Activity	Other Limits						
NA	General or Specific exempted waste	Waste that meets all the conditions of a Resource Recovery Exemption under clause 51A of the Protection of the Environment Operations (Waste) Regulation 2005	As specified in each particular resource recovery exemption	NA						
L4 Noise limits										
L4.1 Limit Conditions										

1 Administrative Conditions	Compliance	Audit Findings
<p>Noise generated at the premises must not exceed the noise limits in the table below. The location groups referred to in the table below are indicated by Table 4 of 'Tomingley Gold Project – Noise and Blasting Assessment' (NBA) prepared by SLR Consulting dated September 2011 (Report Number 10-7910R1D10 Draft 10).</p>	Partially Compliant	<p>Refer to Schedule 3 Clause 3.</p> <p>Refer to Recommendation 3.</p>
<p>Note: Refer to figure in Appendix 4 of Project Approval 09-0155 for noise locations. However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) of these residences/ land to generate higher noise levels, and the Proponent has advised the Department of Planning and Infrastructure and EPA in writing of the terms of this agreement.</p>		
<p>L4.2 For the purpose of condition L3.1;</p> <ul style="list-style-type: none"> • Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays. • Evening is defined as the period 6pm to 10pm. • Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays. 		
<p>L4.3 The noise limits set out in condition L3.1 apply under all meteorological conditions except for the following:</p> <ol style="list-style-type: none"> a) Wind speeds greater than 3 metres/second at 10 metres above ground level. b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or c) Stability category G temperature inversion conditions. 	Partially Compliant	<p>The noise limits in the criteria do not apply during worst-case conditions for noise propagation. In future any noise compliance monitoring should ensure that if monitoring occurs during these conditions that these are differentiated and does not mean a non compliance has occurred with respect to the EPL. As mentioned above TGO are applying building treatments to all potentially impacted houses as a proactive way to manage noise from site.</p> <p>Refer to Recommendation 3 and Corrective Action 7.</p>

1 Administrative Conditions	Compliance	Audit Findings
<p>L4.4 For the purposes of condition L3.3: Data recorded by a meteorological station installed on site must be used to determine meteorological conditions; and Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.</p>	Partially Compliant	A meteorological station installed on site however temperature inversion conditions are not currently being determined. Refer to Schedule 3 clause 5b and Clause 20b.
<p>L4.5 To determine compliance: a) with the Leq(15 minute) noise limits in condition L3.1, the noise measurement equipment must be located:</p> <ul style="list-style-type: none"> • approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or • within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable • within approximately 50 metres of the boundary of a National Park or a Nature Reserve. 	Non Compliant	<p>Noise compliance assessment undertaken by qualified consultant - Noise and sound services in conjunction with Bruel and Kaejer</p> <p>The annual Noise Compliance Assessment Report fails to address the Industrial Noise Policy modifying factor adjustments for intermittent, impulsive or low frequency noise meaning there may be greater levels of non-compliance.</p> <p>Corrective Action 11: Any future noise compliance reports need to include the Industrial Noise Policy modifying factor adjustments to the measured mine site noise levels.</p>
<p>b) with the LA1(1 minute) noise limits in condition L3.1, the noise measurement equipment must be located within 1 metre of a dwelling façade. c) with the noise limits in condition L3.1 the noise measurement equipment must be located,</p> <ul style="list-style-type: none"> • at the most affected point at a location where there is no dwelling at the location; or • at the most affected point within an area at a location prescribed by conditions L3.5(a) or L3.5(b). 		
<p>L4.6 A non-compliance of condition L3.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:</p> <ul style="list-style-type: none"> • at a location other than an area prescribed by conditions L3.5(a) and L3.5(b); and/or • at a point other than the most affected point at a location. 	Not Applicable	This scenario has not occurred.

1 Administrative Conditions	Compliance	Audit Findings
L4.7 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.		Refer to Section L4.5. Refer to Corrective Action 11.
L5 Blasting		
L5 Blasting Limits		
L5.1 The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded	Partially Compliant	Blasting monitoring is summarised on the company webpage, There was one exceedance on 1 July 2014 and this was reported to EPA on 9 July 2014. Since the exceedance TGO have implemented new approval processes for blast plans that includes more levels of sign off. The new –pre blast checklist was observed during the audits which includes signoff by the shot crew, observers and blast guards. The incident investigation (#732) was sighted during the audit.
L5.2 The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.		Refer to L5.1
L5.3 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Compliant	No exceedances were recorded at the sensitive receptor locations.
L5.4 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.	Compliant	No exceedances were recorded at the sensitive receptor locations.
L5.5 Blasting at the premises may only take place between 9:00am - 5pm Monday to Saturday. Blasting is not permitted on Sundays or Public Holidays.	Compliant	Blasting records are available on the company webpage in the monthly environmental reports. All blasts observed take place after 9 am and before 5 pm.

1 Administrative Conditions	Compliance	Audit Findings
L5.6 Blasting outside of the hours specified in L4.5 can only take place with the written approval of the Environment Protection Authority (EPA).	Not Applicable	This scenario has not occurred.
L5.7 The blasting limits do not apply if the Proponent has a written agreement with the relevant landowner, and has advised the Department of Planning and Infrastructure and EPA in writing of the terms of this agreement.	Not Applicable	This scenario has not occurred.
L5.8 Blasting at the premises is limited to the following on each day on which blasting is permitted or as otherwise approved in writing by the EPA: a) a maximum of 3 blasts per day; This condition does not apply to blasts that generate ground vibration of 0.5mm/s or less at any residence on privately owned land, or blasts required to ensure the safety of the site or its workers.	Compliant	A review of the blasting summaries in the monthly monitoring reports shows that there is generally one blast a day. Days where there are multiple blasts show ground vibration of 0 mm/s
L6 Potentially offensive odour	Compliant	Odour is not an issue from the site
L6.1 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises. Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environmental protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.	Compliant	Odour is not an issue from the site
L6.2 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.	Compliant	Odour is not an issue from the site
4 Operating Conditions		
O1 Activities must be carried out in a competent manner		

1 Administrative Conditions	Compliance	Audit Findings
<p>O1.1 Licensed activities must be carried out in a competent manner. This includes:</p> <ul style="list-style-type: none"> a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity. 	Compliant	<p>TGO operate their processing, handling, movement and storage of ore, soil and associated materials and substances in accordance with a range of site management plans and procedures as referenced throughout this report.</p> <p>Refer to Schedule 3, Clause 49. Monthly report from JR Richards TGO Report spreadsheet, April 2014 and December 2014. Includes register of waste removed, volumes. JR Richards contract Renewable Oil Services EPA transport licence no. 12991 and EPA depot licence no. 13092 for removal of oily rags, waste oil, filters etc. Goes to plant in Wagga for reprocessing/recycling. TGO personnel advised that Emeco use Sam's Liquid Waste to pump waste oil from servicing the site's trucks however no documentation sighted.</p>
O2 Maintenance of plant and equipment		
<p>O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:</p> <ul style="list-style-type: none"> a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner. 	Compliant	Refer to Schedule 3 Clause 10.
O3 Dust		

1 Administrative Conditions	Compliance	Audit Findings
<p>O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.</p> <p>O3.2 All dust control equipment must be operable at all times with the exception of shutdowns required for maintenance.</p>	<p>Non Compliant</p>	<p>During the audit there was excessive dust due to high wind conditions blowing towards the nearest receptors. Mining vehicles continued to operate on the waste rock dump and elsewhere onsite even though the recorded dust levels that day were already exceeding the PM10 criteria</p> <p>Dust management has been challenging for the site predominantly due to the restricted water availability. Efforts to minimise dust have included stopping the activity, operating water carts, seeding and dust suppression products.</p> <p>Sighted Dust SSP.</p> <p>Refer to Corrective Action 2.</p>
<p>O3.3 Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.</p>		<p>Trucks carrying any load that may cause dust are covered.</p>
<p>O4 Other operating conditions</p>		
<p>O4.1 Bunding Requirements All above ground storage facilities containing flammable and combustible liquids must be bunded in accordance with Australian Standard AS 1940-2004.</p>	<p>Partially Compliant</p>	<p>Refer to SOC, Clause 5.15.</p> <p>Refer to Recommendation 18.</p>
<p>O4.2 A minimum of 500mm freeboard must be maintained on the Tailings Storage Facility at all times.</p>	<p>Compliant</p>	<p>Refer to Schedule 3, Clause 28.</p>
<p>O4.3 A minimum of 500mm freeboard must be maintained on the process water dam at all times.</p>	<p>Compliant</p>	<p>As per Clause O4.2.</p>

1 Administrative Conditions	Compliance	Audit Findings
<p>O4.4 Stormwater/Sediment - Construction Phase</p> <p>A stormwater management scheme must be prepared for all aspects of the construction phase of the development and must be implemented. Implementation of the scheme must mitigate the impacts of stormwater runoff from and within the premises during the construction. The scheme should be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the scheme should be consistent with the guidance contained in Managing Urban Stormwater: Control Handbook (available from the EPA)</p>	Compliant	Sediment Pond 1 was installed prior to construction. All runoff was directed to Sediment Pond 1 during construction. No documentation confirming this was sighted during the audit.
5 Monitoring and Recording Conditions		
M1 Monitoring records		
M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Compliant	Sighted monitoring records for all parameters required by this EPL. Load Based Licensing is not applicable to this site as there is no licensed discharge point.
<p>M1.2 All records required to be kept by this licence must be:</p> <p>a) in a legible form, or in a form that can readily be reduced to a legible form;</p> <p>b) kept for at least 4 years after the monitoring or event to which they relate took place; and</p> <p>c) produced in a legible form to any authorised officer of the EPA who asks to see them.</p>	Compliant	As per Clause M1.1.
<p>M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:</p> <p>a) the date(s) on which the sample was taken;</p> <p>b) the time(s) at which the sample was collected;</p> <p>c) the point at which the sample was taken; and</p> <p>d) the name of the person who collected the sample.</p>	Partially Compliant	<p>TGO maintain records of all samples taken as required by the EPL including all of the information required by Clause M1.3.</p> <p>Sighted COA ES1412294 1 June 2014 for surface water quality sampling which included sampler name, date and time and monitoring location.</p> <p>Sighted Carbon Based Environmental June 2014 Field Notes for groundwater sampling which included all required information.</p> <p>Sighted depositional dust gauge COC June 2014 which included sampler, location, date (time not relevant).</p> <p>Sighted HiVol sampler COC August 2014, which included sample ID, date, submitted by, time not relevant.</p> <p>However when water quality sampling commenced, the inclusion of the time and name of person collecting the sample was overlooked</p>

1 Administrative Conditions	Compliance	Audit Findings
		occasionally, sighted Water Monitoring TGO R1 spreadsheet with missing information. TGO have since developed Surface Water Monitoring Site Specific Procedure (31 December 2014) that specifies all information required to be recorded with water quality samples.
<p>M2 Requirement to monitor concentration of pollutants discharged</p> <p>M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <p>M2.2 Water and/ or Land Monitoring Requirements</p> <p>M2.3 For the purpose of the Table above Special Frequency 1 = During Discharge</p>	Compliant	Refer to Clause M1.1.
M3 Testing methods - concentration limits		
<p>M3.1 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.</p>	Partially Compliant	<p>Sighted Surface Water Monitoring Site Specific Procedure (31 December 2014) however it does not reference Approved Methods for Sampling and Analysis.</p> <p>Recommendation 24: Review the Surface Water Monitoring Site Specific Procedure to ensure they are in accordance with the Approved Methods publication, and reference this accordingly.</p>
M4 Environmental monitoring		
<p>M4.1 To assess compliance with Condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.5 and:</p> <p>a) at each one of the locations listed in Condition L3.1;</p>	Compliant	Compliance noise monitoring is undertaken annually at all of the relevant sites listed in the EPL.
<p>b) occur annually in a reporting period;</p>	Compliant	Annual noise compliance reports are undertaken by Noise and Sound Services and are available on the TGO webpage.

1 Administrative Conditions	Compliance	Audit Findings																																			
<p>c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy for a minimum of:</p> <ul style="list-style-type: none"> • 1.5 hours during the day; • 30 minutes during the evening; and • 1 hour during the night. 	Partially compliant	<p>The annual compliance report only includes noise measurements during the evening and night time periods, as these are considered worst case for noise impacts and noise propagation.</p> <p>It is recommended however that the annual compliance noise report include some daytime data, from the permanent noise monitoring station set up at the nearest sensitive receptor.</p>																																			
d) occur for three consecutive operating days.	Compliant																																				
M5 Weather monitoring																																					
M5.1 For each point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.	Compliant	Site weather station monitors these parameters and is verified in the annual calibration and weather station specification documents.																																			
Weather - Monitoring Point 1 - Weather Station on the mine site																																					
<table border="1"> <thead> <tr> <th>Parameter</th> <th>Units of measure</th> <th>Frequency</th> <th>Averaging Period</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Rainfall</td> <td>mm</td> <td>Continuous</td> <td>1 hour</td> <td>AM-4</td> </tr> <tr> <td>Wind direction @ 10 metres</td> <td>Degrees</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Wind speed @ 10 metres</td> <td>m/s</td> <td>Continuous</td> <td>15 minute</td> <td>AM-2 & AM-4</td> </tr> <tr> <td>Additional requirements</td> <td></td> <td></td> <td></td> <td>AM-1 & AM-4 AM-2 & AM-4</td> </tr> <tr> <td>-Siting</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-Measurement</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Parameter	Units of measure	Frequency	Averaging Period	Sampling Method	Rainfall	mm	Continuous	1 hour	AM-4	Wind direction @ 10 metres	Degrees	Continuous	15 minute	AM-2 & AM-4	Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4	Additional requirements				AM-1 & AM-4 AM-2 & AM-4	-Siting					-Measurement						
Parameter	Units of measure	Frequency	Averaging Period	Sampling Method																																	
Rainfall	mm	Continuous	1 hour	AM-4																																	
Wind direction @ 10 metres	Degrees	Continuous	15 minute	AM-2 & AM-4																																	
Wind speed @ 10 metres	m/s	Continuous	15 minute	AM-2 & AM-4																																	
Additional requirements				AM-1 & AM-4 AM-2 & AM-4																																	
-Siting																																					
-Measurement																																					
M6 Recording of pollution complaints																																					
M6.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Compliant	Refer to Schedule 5 Clause 1.																																			

1 Administrative Conditions	Compliance	Audit Findings
M6.2 The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Compliant	Sighted Community Enquiry Database that includes all of the information required by Clause M6.2.
M6.3 The record of a complaint must be kept for at least 4 years after the complaint was made.	Not Verified	TGO have only been in operation for approximately 14 months with 12 months of construction prior to that. This Clause should be verified at the next independent audit.
M6.4 The record must be produced to any authorised officer of the EPA who asks to see them.	Not Verified	At the time of audit, it was not determined whether the EPA have sought records from TGO or if TGO provided these records. The auditors noted that all records related to the EPL were available on site.
M7 Telephone complaints line		
M7.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Compliant	The complaints line is directed to the Manager Environment and Community during business hours and weeknights, and to the Duty Manager on weekends.
M7.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Compliant	Advertised in several local newspapers, sighted advertisement.
M7.3 The preceding two conditions do not apply until 3 months after a) the date of the issue of this licence or b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.	Compliant	Refer to Clause M7.1 and M7.2.
6 Reporting Conditions		

1 Administrative Conditions	Compliance	Audit Findings
R1 Annual return documents		
<p>R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:</p> <ul style="list-style-type: none"> a) a Statement of Compliance; and b) a Monitoring and Complaints Summary. <p>At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p>	Partially Compliant	Sighted EPA Annual Return completed and submitted December 2014. This was in the required form and included a statement of compliance as well as summary of monitoring and complaints. However system outages of the HiVol sampler and TEOM that were identified during the audit were not reported as items of non-compliance in the annual return, .
<p>R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.</p> <p>Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.</p>	Compliant	EPA Annual Return completed and submitted December 2014. Licence anniversary date is 23 October.
<p>R1.3 Where this licence is transferred from the licensee to a new licensee:</p> <ul style="list-style-type: none"> a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. <p>Note: An application to transfer a licence must be made in the approved form for this purpose.</p>	Not Applicable	The EPL remains with TGO and has not been transferred to another party.
<p>R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:</p> <ul style="list-style-type: none"> a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates. 	Not Applicable	The licence has not been surrendered or revoked.

1 Administrative Conditions	Compliance	Audit Findings
R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Compliant	Refer to Clause R1.2.
R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Not Verified.	Refer to Clause M6.3.
R1.7 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Compliant	Sighted signed copy of the Annual Return by David Ian Chalmers, Managing Director Alkane Resources 5 December 2014.
R1.8 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.	Compliant	Refer to Clause R1.7.
R2 Notification of environmental harm		
R2.1 Notifications must be made by telephoning the Environment Line service on 131 555. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Compliant	TGO have notified the EPA of off site discharges of surface water. Refer to Schedule 3 Clause 23. As mentioned in Schedule 5 Clause 1 (e), the EPA have requested that TGO notify them of all breaches of licence criteria via the environment line.
R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	Compliant	Refer to Schedule 3 Clause 23.
R3 Written report		

1 Administrative Conditions	Compliance	Audit Findings
<p>R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:</p> <p>a) where this licence applies to premises, an event has occurred at the premises; or</p> <p>b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,</p> <p>and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.</p>	Compliant	Reports provided to the EPA for incidents discussed in Schedule 3 Clause 23.
<p>R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.</p>	Compliant	Refer to Clause R3.2.
<p>R3.3 The request may require a report which includes any or all of the following information:</p> <p>a) the cause, time and duration of the event;</p> <p>b) the type, volume and concentration of every pollutant discharged as a result of the event;</p> <p>c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;</p> <p>d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;</p> <p>e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;</p>	Compliant	Refer to Clause R3.1.
R4 Other reporting conditions		

1 Administrative Conditions	Compliance	Audit Findings
<p>R4.1 Noise Monitoring Report A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the yearly monitoring. The assessment must be prepared by a suitably qualified and experienced acoustical consultant and include:</p> <ul style="list-style-type: none"> a) an assessment of compliance with noise limits presented in Condition L3.1; and b) an outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in Condition L3.1. 	Compliant	The annual noise compliance report has been completed and is published on the TGO webpage. (September 2013 and October 2014). Sighted email correspondence with the EPA confirming receipt of the report on 22 October 2014.
<p>R4.2 Reporting Fauna Deaths or Injury The licensee must report any incident of death or injury (including bogging or miring) of fauna (avian or terrestrial) associated with the Tailing Impoundment or tailings runoff dam by telephoning the EPA's Pollution Line 131 555 as soon as the licensee becomes aware of the incident.</p> <p>The licensee must provide written details of the notification with respect of the above condition to the EPA within 7 days of the date which the incident occurred.</p>	Compliant	Refer to SOC, Clause 7.25.
7 General Conditions		
G1 Copy of licence kept at the premises or plant		
G1.1 A copy of this licence must be kept at the premises to which the licence applies.	Compliant	Sighted copy of EPL on premises during audit.
G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.	Not Verified	Refer to Clause M6.4.
G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant	Refer to Clause G1.1.
G2 Signage		

1 Administrative Conditions	Compliance	Audit Findings
G2.1 The location of each Monitoring and Discharge point must be clearly marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.	Compliant.	Sighted signage of monitoring locations during site inspection.

Table 11 Mining Lease

Mining Lease Conditions	Compliance	Audit Findings
1. Notice to Landholders		
(a) Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing indicating that this lease has been granted/renewed and whether the lease includes the surface. An adequate plan and description of the lease area must accompany the notice.	Not Applicable	Alkane Resources purchased the land therefore this clause is not applicable.
(b) If there are ten or more landholders affected, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	Not Applicable	Refer above
2. Environmental Harm		
(a) The lease holder must implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of any activities under this lease. (b) For the purposes of this condition: (i) environment means components of the earth, including: (A) land, air and water, and (B) any layer of the atmosphere, and (C) any organic or inorganic matter and any living organism, and (D) human-made or modified structures and areas, and includes interacting natural ecosystems that include components referred to in paragraphs (A)-(C). (ii) harm to the environment includes any direct or indirect alteration of the environment that has the effect of degrading the environment and, without limiting the generality of the above, includes any act or omission that results in pollution, contributes to the extinction or degradation of any threatened species, populations or ecological communities and their habitats and causes impacts to places, objects and features of significance to Aboriginal people.	Not Verified	Refer to Schedule 3, Clause 23.
3. Mining Operations Plan		

Mining Lease Conditions	Compliance	Audit Findings
(a) Mining operations must not be carried out otherwise than in accordance with a Mining Operations Plan (MOP) which has been approved by the Director-General.	Compliant	Sighted Second Mining Operations Plan as approved by the DG. Refer to Schedule 3 Clause 53 and SOC, Clause 7.3.
(b) The MOP must: (i) identify areas that will be disturbed by mining operations; (ii) detail the staging of specific mining operations; (iii) identify how the mine will be managed to allow mine closure; (iv) identify how mining operations will be carried out in order to prevent and or minimise harm to the environment; (v) reflect the conditions of approval under: • the Environmental Planning and Assessment Act 1979 • the Protection of the Environment Operations Act 1997 • and any other approvals relevant to the development including the conditions of this lease; and • have regard to any relevant guidelines adopted by the Director-General.	Compliant	The Second MOP addresses the requirements of Clause 3 (b). The MOP does not yet address mine closure as that will not occur during the term of the current MOP.
(c) The leaseholder may apply to the Director-General to amend an approved MOP at any time.	Compliant	During the period of review of this audit, TGO have had a second version of the MOP approved by T&I.
(d) It is not a breach of this condition if: (i) the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1992, the Environmental Planning and Assessment Act 1979, Protection of the Environment Operations Act 1997, Mine Health and Safety Act 2004 I Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 I Coal Mine Health and Safety Regulation 2006 or the Occupational Health and Safety Act 2000; and (ii) the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Not Verified	Not Verified
(e) A MOP ceases to have effect 7 years after date of approval or other such period as identified by the Director-General.	Compliant	The Second MOP is for the period 1 April 2014 to 31 March 2021.
4. Environmental Management Report		

Mining Lease Conditions	Compliance	Audit Findings
(a) The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director-General.	Compliant	TGO submitted their first AEMR to T&I on 14 July 2014, sighted email from Mark Williams TGO to DP&E, T&I, EPA and NSC. No formal response was received from T&I regarding the AEMR. The AEMR review meeting was held between TGO and T&I on 2 October 2014, sighted handwritten meeting minutes.
(b) The EMR must: (i) report against compliance with the MOP; (ii) report on progress in respect of rehabilitation completion criteria; (iii) report on the extent of compliance with regulatory requirements; and (iv) have regard to any relevant guidelines adopted by the Director-General;	Compliant	The 2013 AEMR was predominantly written to address the requirements of the Project Approval however it addressed the requirements of Clause 4 (b) in the following sections: <ul style="list-style-type: none"> • Compliance with MOP – Rehabilitation Activities Section and Mining Activities Section 3 and 6; • Rehabilitation against targets – Section 4.11.1 • Compliance with regulatory requirements – Section 4.12 No guidelines were provided by the DG.
5. Environmental Incident Report		
(a) The lease holder must report any environmental incidents. The report must: (i) be prepared according to any relevant Departmental guidelines; (ii) be submitted within 24 hours of the environmental incident occurring: (b) For the purposes of this condition, environmental incident includes: (i) any incident causing or threatening material harm to the environment (ii) any breach of Conditions 1 to 9 and 11 to 24; (iii) any breach of environment protection legislation; or, (iv) a serious complaint from landholders or the public. (c) For the purposes of this condition, harm to the environment is material if: (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, where loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.		Refer to Schedule 5 Clause 1.
6. Additional Environmental Reports		

Mining Lease Conditions	Compliance	Audit Findings
Additional environmental reports may be required from time to time as directed in writing by the Director-General and must be lodged as instructed.	Not Applicable	No additional reports have been requested by the DG.
7. Rehabilitation		
Any disturbance as a result of activities under this lease must be rehabilitated to the satisfaction of the Director-General.	Compliant	The Second MOP that has been approved by the DG includes a Rehabilitation Management Plan. No rehabilitation has occurred to date, TGO have been in discussion with T&I regarding delaying their program of rehabilitation due to adverse weather conditions.
9. Working Requirement		
<p>The lease holder must:</p> <p>(a) ensure that at least 30 competent people are efficiently employed in relation to the mining process or mining operations on the lease area or</p> <p>(b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$525,000.00 per annum whilst the lease is in force.</p> <p>The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.</p>	Compliant	Operations observed on site clearly demonstrated that TGO are employing greater than 30 competent people and expending greater than \$525,000.
10. Blasting		
<p>(a) Ground Vibration</p> <p>The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p>	Compliant	No exceedances were recorded at the sensitive receptor locations.

Mining Lease Conditions	Compliance	Audit Findings
<p>(b) Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment, Climate Change and Water.</p>	Compliant	Refer to EPL, Clause L.
11. Safety		
<p>Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be notified in writing to the Department and filled in or otherwise rendered safe to a standard acceptable to the Director-General.</p>	Compliant	The TGO site is fully fenced with security fencing and warning signs, to protect the community from mining operations. TGO personnel advised that they undertake regular inspections of security fences.
12. Prevention of soil erosion and pollution		
<p>Prospecting operations must be carried out in a manner that does not cause or aggravate air pollution, water (including groundwater) pollution, soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan.</p>	Compliant	TGO undertake grade control drilling as part of prospecting operations on the current mining lease. It is not considered that these operations cause soil erosion or pollution risk.
13. Transmission lines, communication lines and pipelines		
<p>Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions stipulated.</p>	Compliant	Refer to Schedule 2, Clause 10.
14. Roads and tracks		
<p>(a) The lease holder must pay to the relevant roads authority in control of the road or track the reasonable costs incurred by the roads authority in making good any damage to roads or tracks caused by operations carried out under this lease less any amount paid or payable from the Mine Subsidence Compensation Fund.</p>	Not Applicable	Not applicable.

Mining Lease Conditions	Compliance	Audit Findings
(b) During wet weather the use of any road or track must be restricted so as to prevent damage to the road or track.	Not Applicable	All roads and tracks on site built for all weather use.
(c) Existing access tracks should be used for all operations where reasonably practicable. New access tracks must be kept to a minimum and be positioned in order to minimise damage to the land, watercourses or vegetation.	Compliant	TGO utilised existing access tracks for operations including the current site access was the existing farm access, and the emergency access is an existing track.
(d) Temporary access tracks must be rehabilitated and revegetated to the satisfaction of the Director-General as soon as reasonably practicable after they are no longer required under this lease.	Not Verified	Temporary access tracks are integrated into the final domains. The Second MOP doesn't describe the process of rehabilitation, just what the final landform will be.
15. Trees and vegetation		
(a) The lease holder must not fell trees, strip bark or cut timber on any land subject of this lease without the consent of the landholder who is entitled to the use of the timber.	Not Applicable	Not applicable as TGO are the landholder.
(b) The lease holder must contact Forests NSW and obtain any required permit, licence or approval before taking timber from any Crown land within the lease area.	Not Applicable	There is no crown land within the lease area.
16. Use of mercury and cyanide		
The lease holder must not use mercury or cyanide or any solution containing cyanide for the recovery of minerals on the lease area without the prior written approval of the Minister and subject to any conditions stipulated.	Compliant	Sighted letter from Bruce Battye, NSW Health to Simone Painter, TGO dated 29 October 2013 that authorised TGO to purchase cyanide for the purpose of extracting gold and silver from ore material.
17. Resource recovery		
(a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, notice in writing to the lease holder may be given requiring the holder to recover	Not Applicable	TGO have not received any direction from the DG in relation to this Clause.

Mining Lease Conditions	Compliance	Audit Findings
such minerals.		
(b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.		
(c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.		
18. Indemnity		
The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be licensed or compelled to do.	Compliant	TGO maintain Public Liability insurance through Strathearn Insurance Brokers, sighted Confirmation of Insurance dated 4 December 2014.
19. Security		
a) This authorisation is subject to a condition that the holder of the authorisation is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the authorisation, including obligations of all or any kind under the authorisation that may arise in the future.	Compliant	TGO maintain a security deposit as required by this clause. Sighted Deed of Security Deposit Bond for the sum of \$3,291,000 through Westpac Banking Corporation dated 24 December 2012 and term deposit renewal advice dated 24 December 2014.
b) The amount of the security deposit to be provided has been assessed by the Director General of the Department of Trade and Investment, Regional Infrastructure and Services at \$3,291,000.00.		
c) The security deposit is to be provided by way of a cash deposit (with no entitlement to any interest thereon) or in such other form as may be approved by the Director General (or their delegate).		

Mining Lease Conditions	Compliance	Audit Findings
<p>22. Prescribed dam</p> <p>(a) Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Tomingley Residue Storage Facility without the prior written approval of the Minister and subject to any conditions stipulated.</p> <p>(b) Where the lease holder desires to mine within the notification area he or she must:</p> <p>(i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and</p>	Compliant	TGO received authorisation from the NSW Dam Safety Committee to mine within the notification area of the RSF. Sighted letter from Steve Knight, NSW DSC to the Director-General Mineral Titles dated 11 March 2014.

Mining Lease Conditions	Compliance	Audit Findings
<p>(ii) provide such information as the Minister may direct.</p> <p>(c) The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. This sub-paragraph is complied with if:</p> <p>(i) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).</p> <p>(ii) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined.</p> <p>(iii) the Director-General has complied with any reasonable request made by the Dams Safety Committee or the owner of the dam for further information in connection with the mining proposal.</p> <p>(iv) the Dams Safety Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and</p> <p>(v) where the Dams Safety Committee has made recommendations the approval is in terms that are: in accordance with those recommendations; or where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub paragraph (ii) of this paragraph.</p> <p>(vi) Where the Minister does not accept the recommendations of the Dams Safety Committee or where the Dams Safety Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: as determined by agreement between the Minister and the Minister administering the Dams Safety Act 1978; or in the event of failure to reach such agreement - as determined by the Premier.</p> <p>(d) The Minister, on notice from the Dams Safety Committee, may at any time or times:</p> <p>(i) cancel any approval given where a notice pursuant to Section 18 of the Dams Safety Act 1978 is given.</p> <p>(ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.</p>		
23. Suspension of Mining Operations		

Mining Lease Conditions	Compliance	Audit Findings
The holder of a mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	Not Applicable	Mining operations are ongoing at TGO.
24. Cooperation agreement		
<p>The lease holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:</p> <ul style="list-style-type: none"> • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts and • rehabilitation issues. 	Not Applicable	There are no overlapping titles for land at TGO.

Appendix B – Consultation with Regulators

Demelza Scott

From: Sonya Ardill <Sonya.Ardill@environment.nsw.gov.au>
Sent: Tuesday, 7 April 2015 1:01 PM
To: Demelza Scott
Subject: RE: Request for comment - TGO Independent environmental audit

Hi Demelza

I'm so sorry for not getting back to you sooner.

Due to other work commitments at this time we will need to decline your offer.

Regards

Sonya Ardill
Senior Team Leader Planning - North West
Regional Operations Group
Office of Environment and Heritage
PO Box 2111 Dubbo NSW 2830
T: 02 68835313
M: 0428250796
W: www.environment.nsw.gov.au

From: Demelza Scott [mailto:Demelza.Scott@ghd.com]
Sent: Thursday, 2 April 2015 1:11 PM
To: Ardill Sonya
Subject: RE: Request for comment - TGO Independent environmental audit

Hi Sonya,

I just wanted to follow up to see if OEH wanted to provide any feedback on Tomingley Gold's environmental compliance/performance for incorporation into the Independent Environmental Audit Report.

If you could advise ASAP then that would be appreciated.

Regards, Demelza

Demelza Scott
Senior Environmental Scientist

GHD
T: +61 2 6393 6410 | V: 216410 | M: +61 417 213 748 | E: demelza.scott@ghd.com
72 McNamara St Orange NSW 2800 Australia | www.ghd.com

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

From: Demelza Scott
Sent: Friday, 27 February 2015 12:02 PM
To: 'Sonya Ardill'
Subject: RE: Request for comment - TGO Independent environmental audit

Hi Sonya,

We thought that OEH would have interest in Tomingley's management of vegetation on site, their biodiversity management plan, PVP to manage their offset sites etc. We were interested to know if you had any concerns in how they had managed biodiversity at the site to date that you wanted us to review while we were at site next week conducting the audit or to consider in finalising our conclusions on the site's performance later next month.

Feel free to give me a call if you would like to discuss.

Regards, Demelza

Demelza Scott
Senior Environmental Scientist

GHD

T: +61 2 6393 6410 | V: 216410 | M: +61 417 213 748 | E: demelza.scott@ghd.com
72 McNamara St Orange NSW 2800 Australia | www.ghd.com

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

From: Sonya Ardill [<mailto:Sonya.Ardill@environment.nsw.gov.au>]
Sent: Friday, 27 February 2015 11:57 AM
To: Demelza Scott
Subject: RE: Request for comment - TGO Independent environmental audit

Hi Demelza

I got your message. We'll see how we go re getting something to you by the 20th. Is there anything in particular you'd like OEH to provide feedback on?

Sonya Ardill
Senior Team Leader Planning - North West
Regional Operations Group
Office of Environment and Heritage
PO Box 2111 Dubbo NSW 2830
T: 02 68835313
M: 0428250796
W: www.environment.nsw.gov.au

From: Demelza Scott [<mailto:Demelza.Scott@ghd.com>]
Sent: Wednesday, 25 February 2015 3:24 PM
To: Ardill Sonya
Cc: Maurice Pignatelli
Subject: Request for comment - TGO Independent environmental audit

Hi Sonya,

GHD are conducting an independent environmental audit of Tomingley Gold Operations. As part of this audit process, we are seeking your input into understanding their compliance status, please see attached letter.

I will be in touch to see if we can coordinate a teleconference early next week.

Kind regards, Demelza

Demelza Scott
Senior Environmental Scientist

GHD

T: +61 2 6393 6410 | V: 216410 | M: +61 417 213 748 | E: demelza.scott@ghd.com
72 McNamara St Orange NSW 2800 Australia | www.ghd.com

Please consider our environment before printing this email

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

This email is intended for the addressee(s) named and may contain confidential and/or privileged information.
If you are not the intended recipient, please notify the sender and then delete it immediately.
Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment and Heritage.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

This e-mail has been scanned for viruses

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

This email is intended for the addressee(s) named and may contain confidential and/or privileged information.
If you are not the intended recipient, please notify the sender and then delete it immediately.
Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the NSW Office of Environment and Heritage.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

This e-mail has been scanned for viruses



23 February 2015

Sonya Ardill
Senior Team Leader Planning, North West Region
Office of Environment and Heritage
PO Box 2111
Dubbo NSW 2830

Our ref: 21/24307

8891

Your ref:

Dear Sonya

Independent Environmental Audit of Tomingley Gold Operations Request for comment

GHD Pty Ltd has been engaged by Alkane Resources to undertake an independent environmental audit of Tomingley Gold Operations (TGO) in accordance with its Project Approval granted by the Department of Planning and Environment. The scope of the Audit is to:

- assess the environmental performance of the project;
- assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the above mentioned approvals; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/ or any assessment, plan or program required under the approvals.

TGO have a number of auditable obligations to OEHL under the Project Approval, a number of relevant conditions of the Project Approval make specific reference to OEHL (see attached). I am writing to you to invite comment from OEHL in regard to these obligations as well as TGO's performance with other requirements, as you may deem appropriate.

The audit is scheduled to be conducted between the **4 and 6 March 2015**. We wish to invite you to participate in a short teleconference prior to the audit next week to provide your feedback on TGO's compliance/performance so that we may adequately address any of the OEHL's concerns during the audit. If you wish to formalise your response, we are seeking written comments by the **20 March 2015**, as per the structure outlined below.

Requested response structure:

- Compliance with requirements.
- Progress to meeting requirements.
- Details of any specific incidence of non-compliance.
- Adequacy of actions being taken.
- Adequacy of the requirements of the project approval.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request.

All correspondence in relation to this matter should be directed to Demelza Scott, GHD Audit Coordinator on 02 6393 6410 or demelza.scott@ghd.com

Kind regards

A handwritten signature in black ink, appearing to read 'M. Pignatelli', written in a cursive style.

Maurice Pignatelli

Manager - Environmental Management & Audit
+61 2 9239 7464

Attachment - Project approval conditions relevant to OEH

Schedule 3	
37	<p>The Proponent shall prepare a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>(a) be prepared in consultation with OEH, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;</p> <p>(b) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;</p> <p>(c) describe the short, medium, and long term measures that would be implemented to:</p> <ul style="list-style-type: none"> (i) manage the remnant vegetation and habitat on the site and in the offset area/s (if and when applicable); and (ii) implement the biodiversity offset strategy (if and when applicable), including detailed performance and completion criteria; <p>(d) include detailed performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);</p> <p>(e) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:</p> <ul style="list-style-type: none"> (i) enhancing the quality of existing vegetation and fauna habitat; (ii) restoring native vegetation and fauna habitat on the biodiversity areas and rehabilitation area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary); (iii) maximising the salvage of resources within the approved disturbance area – including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area; (iv) collecting and propagating seed; (v) minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings; (vi) controlling weeds and feral pests; (vii) controlling erosion; (viii) managing grazing and agriculture on site; (ix) controlling access; and (x) bushfire management; <p>(f) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria;</p> <p>(g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and</p> <p>(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.</p>
39	<p>The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>(a) be prepared by a suitably qualified and experienced person(s) whose appointment has been endorsed by the Director-General;</p> <p>(b) be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of</p>

	<p>Aboriginal heritage values);</p> <p>(c) be submitted to the Director-General for approval by the end of January 2013, unless the Director General agrees otherwise;</p> <p>(d) include the following for the management of Aboriginal heritage:</p> <p>(i) a description of the measures that would be implemented for:</p> <ul style="list-style-type: none"> · protecting, monitoring and/ or managing heritage items on site; · implementing proposed archaeological investigations and/ or salvage measures for heritage items on site; · managing the discovery of any human remains or previously unidentified Aboriginal objects on site; · maintaining and managing reasonable access for Aboriginal stakeholders to heritage items on site; · on-going consultation with the Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage on site; and · ensuring workers on-site receive suitable heritage inductions prior to carrying out works on the site, and that suitable records are kept of these inductions; <p>(ii) a strategy for the storage of any heritage items salvaged on site, both during the project and in the long term;</p> <p>(e) include the following for the management of non-Aboriginal heritage:</p> <p>(i) a description of the measures that would be implemented for:</p> <ul style="list-style-type: none"> · protecting, monitoring and/ or managing heritage items on site; · managing the discovery of any previously unidentified non-Aboriginal objects on site; and · ensuring workers on-site receive suitable heritage inductions prior to carrying out works on the site, and that suitable records are kept of these inductions; and <p>(ii) a strategy for the storage of any heritage items salvaged on site, both during the project and in the long term.</p>
53	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:</p> <p>(a) be prepared in consultation with the Department, OEH, EPA, NOW and Council;</p> <p>(b) be submitted to the Executive Director, Mineral Resources for approval by the end of March 2013, unless the Director-General agrees otherwise;</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 51;</p> <p>(e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</p> <p>(f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use;</p> <p>(h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</p> <p>(i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and</p>

	(j) build, to the maximum extent practicable, on the other management plans required under this approval.
--	---

Demelza Scott

From: Bradley Tanswell <bradley.tanswell@epa.nsw.gov.au>
Sent: Thursday, 26 February 2015 9:48 AM
To: Demelza Scott
Cc: Mark Williams (InTouch)
Subject: RE: Request for comment - TGO Independent environmental audit

CompleteRepository: 2124307
Description: TGO Independent environmental audit
JobNo: 24307
OperatingCentre: 21
RepoEmail: 2124307@ghd.com
RepoType: Job

Demelza,

Thanks for the invitation for the EPA to provide input into the audit process. The primary issues the EPA would like the audit to focus on include:

- Management and mitigation of Dust and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies;
- Surface water management and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies;
- Management and mitigation of Noise and compliance with relevant conditions of licenses, consent, permits etc of relevant agencies;
- Compliance with Environment Protection Licence 20169;
- Compliance with relevant environmental management/compliance conditions of consent issued by Department of Planning and Environment.

Thanks for the invite however, there is no need for the EPA to be involved in a teleconference.

Regards,

Brad

Brad Tanswell

Acting Head Far West Operations | NSW Environment Protection Authority |

☎: (02) 6883 5367 | 📠: (02) 6884 8675 | 48-52 Wingewarra Street Dubbo NSW 2830 | ✉: bradley.tanswell@epa.nsw.gov.au

Please Note: The EPA is transitioning to electronic document management. We request that you electronically submit all letters and documents for the EPA's Dubbo office to our email address: epa.farwest@epa.nsw.gov.au. Attachments up to 10Mg can be accepted in a single email, larger documents will need to be separated over a number of e-mails. When you submit a larger document (i.e. more than ~ 20 pages) please also send a hard copy to: "EPA, PO Box 2111, Dubbo NSW 2830".

From: Demelza Scott [<mailto:Demelza.Scott@ghd.com>]
Sent: Thursday, 26 February 2015 9:25 AM
To: Tanswell Bradley
Cc: EPA RSD Far West Mailbox
Subject: Request for comment - TGO Independent environmental audit

Hi Bradley,

GHD are conducting an independent environmental audit of Tomingley Gold Operations. As part of this process, we are seeking your input into understanding their compliance status, please see attached letter.

I will be in touch to see if we can coordinate a teleconference early next week.

Kind regards, Demelza

Demelza Scott
Senior Environmental Scientist

GHD

T: +61 2 6393 6410 | V: 216410 | M: +61 417 213 748 | E: demelza.scott@ghd.com
72 McNamara St Orange NSW 2800 Australia | www.ghd.com

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

Please consider our environment before printing this email

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

This email is intended for the addressee(s) named and may contain confidential and/or privileged information.

If you are not the intended recipient, please notify the sender and then delete it immediately. Any views expressed in this email are those of the individual sender except where the sender expressly and with authority states them to be the views of the Environment Protection Authority.

PLEASE CONSIDER THE ENVIRONMENT BEFORE PRINTING THIS EMAIL

This e-mail has been scanned for viruses



26 February 2015

Mr Bradley Tanswell
Acting Head Far West Operations
Environmental Protection Authority
PO Box 2011
Dubbo NSW 2830

Our ref: 21/24307
8887
Your ref:

Dear Bradley

Independent Environmental Audit of Tomingley Gold Operations Request for comment

GHD Pty Ltd has been engaged by Alkane Resources to undertake an independent environmental audit of Tomingley Gold Operations (TGO) in accordance with its Project Approval granted by the Department of Planning and Environment. The scope of the Audit is to:

- assess the environmental performance of the project;
- assess whether it is complying with the requirements in the project approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the approval; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the approvals.

TGO has a number of auditable obligations to the EPA under the Project Approval and EPL 20169, a number of relevant conditions of the Project Approval make reference the EPA (see attached).

GHD are aware of the incidents of non-compliance with EPL 20169 that have occurred at TGO since operations commenced, and that there are ongoing proceedings regarding one of those breaches.

I am writing to you to invite comment from the EPA in regard to the Project Approval and EPL obligations as well as TGO's performance with other requirements, as you may deem appropriate.

The audit is scheduled to be conducted between the **4 and 6 March 2015**. We wish to invite you to participate in a short teleconference prior to the audit next week to provide your feedback on TGO's compliance/performance so that we may adequately address any of the EPA's concerns during the audit. If you wish to formalise your response, we are seeking written comments by the **20 March 2015**, as per the structure outlined below.

Requested response structure:

- Compliance with requirements.
- Progress to meeting requirements.
- Details of incidents of non-compliance.
- Adequacy of actions taken.

- Adequacy of the requirements of the licence.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request.

All correspondence in relation to this matter should be directed to Demelza Scott, GHD Audit Coordinator on 02 6393 6410 or demelza.scott@ghd.com

Kind regards

A handwritten signature in black ink, appearing to read 'M. Pignatelli', written in a cursive style.

Maurice Pignatelli

Manager - Environmental Management & Audit
+61 2 9239 7464

Attachment - Project approval conditions relevant to the EPA

Schedule 3	
6	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. The plan must:</p> <p>(a) be prepared in consultation with the EPA and Council, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;</p> <p>(b) describe the measures that would be implemented to ensure compliance with conditions 3-5 of this schedule; and</p> <p>(c) include a monitoring program that:</p> <ul style="list-style-type: none"> (i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the (ii) adequately supports the proactive and reactive noise management system on site; (iii) includes a protocol for determining exceedances of the relevant conditions of this approval; (iv) evaluates and reports on the effectiveness of the noise management system on site; and (v) provides for the annual validation of the noise model for the project over the first 3 years following the commencement of mining operations.
19	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>(a) be prepared in consultation with the EPA and Council, and be submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;</p> <p>(b) describe the measures that would be implemented to ensure compliance with conditions 15-18 of this schedule;</p> <p>(c) include a program for the implementation of the measures referred to in (b) above;</p> <p>(d) include an air quality monitoring program that</p> <ul style="list-style-type: none"> (i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project; (ii) adequately supports the proactive and reactive air quality management system on site; and (iii) includes a protocol for determining exceedances of the relevant conditions of this approval; and <p>(e) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site.</p>
20	<p>For the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:</p> <p>(a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and</p> <p>(b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy, unless a suitable alternative is approved by the Director-General following consultation with the EPA.</p>
23	<p>The Proponent shall ensure that all surface water discharges from the site comply with:</p> <p>(a) section 120 of the POEO Act; or</p> <p>(b) the discharge limits (both volume and quality) set for the project in any applicable EPL.</p>

32	<p>The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the Director-General. This plan must be prepared in consultation with the EPA and NOW, by a suitably qualified and experienced person(s) whose appointment has been approved by the Director-General, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise.</p> <p>In addition to the standard requirements for management plans (see Condition 3 of Schedule 5), this plan must include:</p> <p>(a) a Site Water Balance that:</p> <p>(i) includes details of:</p> <ul style="list-style-type: none"> • sources and security of water supply; • water use on site; • water management on site; • off-site water discharges, including volume, timing and release point infrastructure requirements; • reporting procedures, including comparisons of the site water balance for each calendar year; and <p>(ii) describe what measures would be implemented to minimise potable water use on site;</p> <p>(b) a Surface Water Management Plan that includes:</p> <p>(i) detailed baseline data on surface water flows and quality in creeks and other waterbodies that could be affected by the project (including Gundong Creek);</p> <p>(ii) a detailed description of the water management system on site, including:</p> <ul style="list-style-type: none"> • clean water diversion systems; • erosion and sediment controls; and • water storages; <p>(iii) detailed plans, including design objectives and performance criteria, for:</p> <ul style="list-style-type: none"> • design and management of the final voids; • design and management of water storages including the residue storage facility and process water dams; and • control of any potential water pollution from the rehabilitated areas of the site; <p>(iv) a program to monitor:</p> <ul style="list-style-type: none"> • the effectiveness of the water management system; potential leakage or spillage from on-site pipelines • surface water flows and quality, stream health and channel stability in Gundong Creek (in so far as it could potentially be affected by the project); <p>(v) a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and</p> <p>(vi) reporting procedures for the results of the monitoring program; and</p> <p>(c) a Groundwater Management Plan, that includes:</p> <p>(i) detailed baseline data on groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the project;</p> <p>(ii) groundwater assessment criteria, including trigger levels for investigating any potentially</p>
----	--

	<p>adverse groundwater impacts;</p> <p>(iii) a program to monitor:</p> <ul style="list-style-type: none"> • groundwater inflows to the open cut and underground mining operations; • the impacts of the project on: <ul style="list-style-type: none"> - alluvial aquifers; and - any groundwater bores on privately-owned land that could be affected by the project; • the seepage/leachate from the residue storage facility, water storages, backfilled voids and the final void; and • the quality of groundwater to be re-used on the site; <p>(iv) a program for the on-going verification and refinement of the groundwater model, including the review and incorporation of additional baseline data obtained in accordance with condition 31, within 12 months of the project approval; and</p> <p>(v) a plan to respond to any exceedances of the groundwater assessment criteria.</p>
48	<p>The Proponent shall prepare and implement a Hazardous Materials Management Plan for the project to the satisfaction of the Director-General. The plan must:</p> <p>(a) be prepared in consultation with relevant government agencies including Council, RMS, EPA, NOW, WorkCover NSW and DRE;</p> <p>(b) be consistent with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold;</p> <p>(c) be submitted to the Director-General for approval prior to commencing mining operations;</p> <p>(d) describe the measures that would be implemented to:</p> <ul style="list-style-type: none"> (i) ensure sodium cyanide and other toxic chemicals are stored and handled on the site in accordance with AS/NZ 4452 – The Storage and Handling of Toxic Substances; and (ii) ensure the transportation of hazardous materials to or from the site is undertaken in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 11 – Route Selection and the Australian Code for the Transport of Dangerous Goods by Road and Rail – current version; and <p>(e) detail the emergency procedures for the Project consistent with the Department’s Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning.</p>
53	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:</p> <p>(a) be prepared in consultation with the Department, OEH, EPA, NOW and Council;</p> <p>(b) be submitted to the Executive Director, Mineral Resources for approval by the end of March 2013, unless the Director-General agrees otherwise;</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 51;</p> <p>(e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</p> <p>(f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final</p>

	<p>landform, and final land use;</p> <p>(h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;</p> <p>(i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and</p> <p>(j) build, to the maximum extent practicable, on the other management plans required under this approval.</p>
--	--

Demelza Scott

From: Kane Winwood <Kane.Winwood@planning.nsw.gov.au>
Sent: Thursday, 26 February 2015 10:38 AM
To: Demelza Scott
Subject: RE: Request for comment - TGO Independent environmental audit

Hi Demelza,

We are currently assessing a modification application which deals with an increase in the amenity bund/emplacement to the north of the Caloma Pit in response to some noise matters, so please bear that in mind.

There are no specific issues that we would like the audit to target, so please review the general operations and compliance with the project approval.

Regards,
Kane

Kane Winwood
Team Leader, Mining Projects

NSW Planning & Environment
GPO Box 39 | Sydney NSW 2001
T 02 9228 6298 E kane.winwood@planning.nsw.gov.au



Subscribe to the e-news at www.planning.nsw.gov.au/enews
Please consider the environment before printing this email.

From: Demelza Scott [<mailto:Demelza.Scott@ghd.com>]
Sent: Wednesday, 25 February 2015 3:20 PM
To: Kane Winwood
Cc: Maurice Pignatelli; Elle Donnelley
Subject: Request for comment - TGO Independent environmental audit

Hi Kane,

As you know, GHD are conducting an independent environmental audit of Tomingley Gold Operations. As part of this audit process, we are seeking your input into understanding their compliance status, please see attached letter.

I will be in touch to see if we can coordinate a teleconference early next week.

Kind regards, Demelza

Demelza Scott
Senior Environmental Scientist

GHD
T: +61 2 6393 6410 | V: 216410 | M: +61 417 213 748 | E: demelza.scott@ghd.com
72 McNamara St Orange NSW 2800 Australia | www.ghd.com

[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) | [TRANSPORTATION](#)

CONFIDENTIALITY NOTICE: This email, including any attachments, is confidential and may be privileged. If you are not the intended recipient please notify the sender immediately, and please delete it; you should not copy it or use it for any purpose or disclose its contents to any other person. GHD and its affiliates reserve the right to monitor and modify all email communications through their networks.

This message is intended for the addressee named and may contain confidential/privileged information. If you are not the intended recipient, please delete it and notify the sender.
Views expressed in this message are those of the individual sender, and are not necessarily the views of the Department.
You should scan any attached files for viruses.

This e-mail has been scanned for viruses



25 February 2015

Kane Winwood
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Our ref: 21/24307

8890

Your ref:

Dear Kane

Independent Environmental Audit of Tomingley Gold Operations Request for comment

GHD Pty Ltd has been engaged by Alkane Resources to undertake an independent environmental audit of Tomingley Gold Operations (TGO) in accordance with its Project Approval granted by the Department of Planning and Environment (DP&E). The scope of the Audit is to:

- assess the environmental performance of the project;
- assess whether it is complying with the requirements in the approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the approvals; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/ or any assessment, plant or program required under the approvals.

I am writing to you to invite comment from DP&E in regard to TGO's compliance with the Project Approval.

The audit is scheduled to be conducted between the **4 and 6 March 2015**. We wish to invite you to participate in a short teleconference prior to the audit next week to provide your feedback on TGO's compliance/performance so that we may adequately address any of DP&E's concerns during the audit. If you wish to formalise your response, we are seeking written comments by the **20 March 2015**, as per the structure outlined below.

Requested response structure:

- Compliance with requirements.
- Progress to meeting requirements.
- Details of any specific incidence of non-compliance.
- Adequacy of actions being taken.
- Adequacy of the requirements of the Project Approval.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request.

All correspondence in relation to this matter should be directed to Demelza Scott, GHD Audit Coordinator on 02 6393 6410 or demelza.scott@ghd.com

Kind regards

A handwritten signature in black ink, appearing to read 'M. Pignatelli', written in a cursive style.

Maurice Pignatelli

Manager - Environmental Management & Audit
+61 2 9239 7464



25 February 2015

Mr Michael Young
Manager
NSW Trade & Investment
161 Kite St
Orange NSW 2000

Our ref: 21/24307
8888

Your ref:

Dear Michael

Independent Environmental Audit of Tomingley Gold Operations Request for comment

GHD Pty Ltd have been engaged by Alkane Resources to undertake an independent environmental audit of Tomingley Gold Operations (TGO) in accordance with its Project Approval granted by the Department of Planning and Environment. The scope of the Audit is to:

- assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the above mentioned approvals; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/ or any assessment, plant or program required under the abovementioned approvals.

TGO have a number of auditable obligations to NSW Trade & Investment (T&I) under the Project Approval and Mining Lease (ML) 1684, a number of relevant conditions make specific reference to T&I (see attached). I am writing to you to invite comment from T&I in regard to the Project Approval and ML 1684, as well as TGO's performance with other requirements, as you may deem appropriate.

The audit is scheduled to be conducted between the **4 and 6 March 2015**. We wish to invite you to participate in a short teleconference prior to the audit next week to provide your feedback on TGO's compliance/performance so that we may adequately address any of the T&I's concerns during the audit. If you wish to formalise your response, we are seeking written comments by the **20 March 2015**, as per the structure outlined below.

Requested response structure:

- Compliance with requirements.
- Progress to meeting requirements.
- Details of any specific incidence of non-compliance.
- Adequacy of actions being taken.
- Adequacy of the requirements of the approvals.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request.

All correspondence in relation to this matter should be directed to Demelza Scott, GHD Audit Coordinator on 02 6393 6410 or demelza.scott@ghd.com

Kind regards

A handwritten signature in black ink, appearing to read 'M. Pignatelli', written in a cursive style.

Maurice Pignatelli

Manager - Environmental Management & Audit
+61 2 9239 7464

Attachment - Project approval conditions relevant to T&I.

Schedule 3	
38	<p>Within three months of the approval of the Biodiversity Management Plan, the Proponent shall lodge a conservation bond with the Department to ensure that the biodiversity offset is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.</p> <p>The sum of the bond shall cover the full cost of implementing the Biodiversity Offset Strategy and be verified by a suitably qualified rehabilitation specialist or quantity surveyor.</p> <p>If the biodiversity offset is implemented to the satisfaction of the Director-General, the Director-General will release the conservation bond. If the offset strategy is not implemented to the satisfaction of the Director-General, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory implementation of the biodiversity offset.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>With the agreement of the Director-General, this bond may be combined with the rehabilitation security deposit administered by DRE.</p>
53	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with the Department, OEH, EPA, NOW and Council; (b) be submitted to the Executive Director, Mineral Resources for approval by the end of March 2013, unless the Director-General agrees otherwise; (c) be prepared in accordance with any relevant DRE guideline; (d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 51; (e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy; (f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary); (g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use; (h) include interim rehabilitation where necessary to minimise the area exposed for dust generation; (i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and (j) build, to the maximum extent practicable, on the other management plans required under this approval.



25 February 2015

Guy Marchant
Director of Planning and Environmental Services
Narromine Shire Council
PO Box 115
Narromine NSW 2821

Our ref: 21/24307

8889

Your ref:

Dear Guy

Independent Environmental Audit of Tomingley Gold Operations Request for comment

GHD Pty Ltd has been engaged by Alkane Resources to undertake an independent environmental audit of Tomingley Gold Operations (TGO) in accordance with its Project Approval granted by the Department of Planning and Environment. The scope of the Audit is to:

- assess the environmental performance of the project;
- assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the approvals; and
- recommend appropriate measures or actions to improve the environmental performance of the project, and/ or any assessment, plant or program required under the approvals.

TGO have a number of auditable obligations to Council under the Project Approval, a number of relevant conditions of the Project Approval make specific reference to Council (see attached). I am writing to you to invite comment from Council in regard to these obligations as well as TGO's performance with other requirements, as you may deem appropriate.

The audit is scheduled to be conducted between the **4 and 6 March 2015**. We wish to invite you to participate in a short teleconference prior to the audit next week to provide your feedback on TGO's compliance/performance so that we may adequately address any of Council's concerns during the audit. If you wish to formalise your response, we are seeking written comments by the **20 March 2015**, as per the structure outlined below.

Requested response structure:

- Compliance with requirements.
- Progress to meeting requirements.
- Details of any specific incidence of non-compliance.
- Adequacy of actions being taken.
- Adequacy of the requirements of the project approval.

Upon receipt of this letter, please advise GHD of the primary contact within your organisation that will be coordinating this request.

All correspondence in relation to this matter should be directed to Demelza Scott, GHD Audit Coordinator on 02 6393 6410 or demelza.scott@ghd.com

Kind regards

A handwritten signature in black ink, appearing to read 'M. Pignatelli', written in a cursive style.

Maurice Pignatelli

Manager - Environmental Management & Audit
+61 2 9239 7464

Attachment - Project approval conditions relevant to Council

Schedule 3	
6	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. The plan must:</p> <p>(a) be prepared in consultation with the EPA and Council, and submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;</p> <p>(b) describe the measures that would be implemented to ensure compliance with conditions 3-5 of this schedule; and</p> <p>(c) include a monitoring program that:</p> <ul style="list-style-type: none"> (i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the (ii) adequately supports the proactive and reactive noise management system on site; (iii) includes a protocol for determining exceedances of the relevant conditions of this approval; (iv) evaluates and reports on the effectiveness of the noise management system on site; and (v) provides for the annual validation of the noise model for the project over the first 3 years following the commencement of mining operations.
14	<p>The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>(a) be prepared in consultation with the OEH, RMS and Council, and submitted to the Director-General for approval prior to undertaking any blasting in conjunction with mining operations on-site;</p> <p>(b) describe the blast mitigation measures that would be implemented to ensure compliance with conditions 7-13 of this schedule; and</p> <p>(c) include a blast monitoring program to evaluate the performance of the project.</p>
19	<p>The Proponent shall prepare and implement an Air Quality and Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:</p> <p>(a) be prepared in consultation with the EPA and Council, and be submitted to the Director-General for approval by the end of January 2013, unless the Director-General agrees otherwise;</p> <p>(b) describe the measures that would be implemented to ensure compliance with conditions 15-18 of this schedule;</p> <p>(c) include a program for the implementation of the measures referred to in (b) above;</p> <p>(d) include an air quality monitoring program that</p> <ul style="list-style-type: none"> (i) uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project; (ii) adequately supports the proactive and reactive air quality management system on site; and (iii) includes a protocol for determining exceedances of the relevant conditions of this approval; and <p>(e) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site.</p>
41	<p>By 31 March 2014, the Proponent shall upgrade Tomingley West Road between the intersection with Narromine-Tomingley Road and the intersection with the mine access road, to the satisfaction of Council.</p>
42	<p>By 31 March 2014, the Proponent shall construct the site access road intersection with Tomingley West Road in accordance with the requirements of Council.</p>

44	<p>The Proponent shall prepare and implement a Traffic Management Plan to the satisfaction of the Director General. The plan shall:</p> <p>(a) focus on traffic management along Tomingley West Road and through the village of Tomingley to minimise the potential for conflicts between project-related traffic and other road users;</p> <p>(b) describe the measures to be implemented to ensure the effective operation of the intersections between the project site and the Newell Highway, including the site access road and Tomingley West Road intersection and the Tomingley-Narromine Road and Newell Highway intersection; and</p> <p>(c) be developed in consultation with Council and RMS, and must be submitted for the approval of the Director-General prior to the commencement of construction.</p>
48	<p>The Proponent shall prepare and implement a Hazardous Materials Management Plan for the project to the satisfaction of the Director-General. The plan must:</p> <p>(a) be prepared in consultation with relevant government agencies including Council, RMS, EPA, NOW, WorkCover NSW and DRE;</p> <p>(b) be consistent with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold;</p> <p>(c) be submitted to the Director-General for approval prior to commencing mining operations;</p> <p>(d) describe the measures that would be implemented to:</p> <p style="padding-left: 40px;">(i) ensure sodium cyanide and other toxic chemicals are stored and handled on the site in accordance with AS/NZ 4452 – The Storage and Handling of Toxic Substances; and</p> <p style="padding-left: 40px;">(ii) ensure the transportation of hazardous materials to or from the site is undertaken in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 11 – Route Selection and the Australian Code for the Transport of Dangerous Goods by Road and Rail – current version; and</p> <p>(e) detail the emergency procedures for the Project consistent with the Department’s Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning.</p>
49	<p>The Proponent shall:</p> <p>(a) minimise the waste generated by the project;</p> <p>(b) ensure that the waste generated by the project is appropriately stored, handled and disposed of; and</p> <p>(c) manage on-site sewage treatment disposal in accordance with the requirements of Council, to the satisfaction of the Director-General</p>
53	<p>The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director, Mineral Resources. This plan must:</p> <p>(a) be prepared in consultation with the Department, OEH, EPA, NOW and Council;</p> <p>(b) be submitted to the Executive Director, Mineral Resources for approval by the end of March 2013, unless the Director-General agrees otherwise;</p> <p>(c) be prepared in accordance with any relevant DRE guideline;</p> <p>(d) outline the procedures to be implemented to achieve the rehabilitation objectives in condition 51;</p> <p>(e) describe how the rehabilitation of the site would be integrated with the implementation of the biodiversity offset strategy;</p> <p>(f) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary);</p> <p>(g) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, and address all aspects of rehabilitation including mine closure, final landform, and final land use;</p>

- | |
|--|
| <ul style="list-style-type: none">(h) include interim rehabilitation where necessary to minimise the area exposed for dust generation;(i) include a program to monitor, independently audit and report on the effectiveness of the measures, and progress against the detailed performance and completion criteria; and(j) build, to the maximum extent practicable, on the other management plans required under this approval. |
|--|

GHD

72 McNamara St, Orange, NSW 2800
PO BOX 950, Orange, NSW 2800
T: (02) 6393 6400 F: (02) 6393 6401 E: oagmail@ghd.com

© GHD 2015

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

G:\21\24307\WP\8864.docx

Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	D. Scott & E. Smith	M. Pignatelli	<i>M. Pignatelli</i>	M. Pignatelli	<i>M. Pignatelli</i>	21/04/2015
0	D. Scott & E. Smith	M. Pignatelli	<i>M. Pignatelli</i>	M. Pignatelli	<i>M. Pignatelli</i>	12/05/2015

www.ghd.com

