



**Heron Resources Limited
Tarago Operations Pty Limited**

Woodlawn Mine

SML 20

Transport Management Plan

August 2017

Document Control Details

Document Control Details					
DOCUMENT DETAILS	Name:		Transport Management Plan		
	Author:		Robert Byrnes		
	Reference:		TMP		
	Revision No.:		7		
	Document Status		Operational		
Revision Details					
REVISION DETAILS	Revision No.	Date	Details of Revision	Reviewed By	Approved By
	1	29/1/15	Internal Review	HS	HS
	2	9/9/15	Issue to CCC and Council	RB	HS
	3	20/9/16	Issue for review	RB	AL
	4	12/5/17	Comments from DPE	RB	AL
	5	24/5/17	Issue to RMS	RM	AL
	6	13/6/17	Issue to DPE for approval	RB	AL
	7	2/8/17	Amendments for MOD2	RB	AL
Circulation Details					
CIRCULATION DETAILS	Name		Department/Organisation		
	Brian Hearne		Heron Resources		
	Robert Byrnes		IEC		
	Andrew Lawry		Heron Resources		
	Stephen Shoosmith		Department of Planning and Infrastructure		
	Andrew Lissenden		Roads and Maritime Services		

Table of Contents

1. Introduction	1
1.1 Purpose	1
1.2 Scope and Objectives	1
1.3 Key Personnel and Responsibilities	1
1.4 Company Structure	2
1.5 Legislative Requirements	2
1.6 Project Approval Requirements	3
1.7 Consultation	5
2. Traffic Management	6
2.1 Road Network	6
2.2 Transport Impacts	6
2.3 Intersection Design and Construction	7
2.4 Hours of Operation	8
2.5 Road Contribution	8
3. Transport Code of Conduct	9
3.1 General Requirements	9
3.2 Heavy Vehicle Speed	9
3.3 Driver Fatigue	10
3.4 Heavy Vehicle Control	10
3.5 Dangerous Goods Transport	11
3.6 Construction Transport	11
3.7 Load Covering and Containment	11
3.8 Truck Dispatch	11
3.9 Vehicle Washdown Facility	12
3.10 Interaction with School Buses	12
3.11 Compliance and Enforcement	12
4. Communication and Reporting	14
4.1 Community and Government Liaison	14
4.2 Community Complaints	14
4.3 Public Access to Information	14
4.4 Record Keeping and Reporting	15
5. Verification and Corrective Action	16
5.1 Transport Related Monitoring	16
5.2 Reporting Procedures	16
5.4 Management Review	17
5.5 Continuous Improvements	17

Appendices

Appendix A - Plans

Appendix B - Traffic Management Plan - Collector Road Intersection Works

Appendix C - Intersection Design and Section 138 Approval

Appendix D - Project Approval

Appendix E - Consultation Log

List of Plans

Plan 1 Locality Plan

Plan 2 Road Network

1. Introduction

1.1 Purpose

The Woodlawn Project involves the transport of processed concentrate to either Port Botany or Port Kembla Gateway bulk terminal. This Transport Management Plan (TMP) has been prepared as part of the Environmental Management System for the Project and in response to conditions of Project Approval 7_0143MOD2. Specifically, this TMP covers:

- Transport arrangements during construction;
- Transport of concentrate from the site;
- Key transport routes using Collector Road to Tarago-Bungendore Road, Braidwood Road and the Hume Highway;
- Transport hours;
- Transport protocol;
- Transport monitoring and data recording.
- Reporting procedures.

The TMP provides a working document for day-to-day management of the transport activities for the Project which will assist with ensuring the operation complies with approval requirements. The plan covers all aspects of transport management on site including: recording of transport movements, tonnages transported, complaints handling, performance indicators, training, roles and responsibilities and the recommended revision procedure.

1.2 Scope and Objectives

This TMP has been developed by Heron to ensure that transport activities associated with the Project meet the expectations of the community and regulators. This TMP also provides a mechanism for continuous improvement to ensure that the Project, shown on Plan 1, will continue to comply with both current and future legislative requirements and community expectations.

1.3 Key Personnel and Responsibilities

Management responsibility for the Woodlawn Mine will be as follows.

Table 1 - Management Responsibilities

Position	Personnel	Company	Responsibility	Contact Details
Managing Director	Wayne Taylor	Heron Resources	Overall responsibility for the construction and operation of the Woodlawn Mine	02 9119 8111
Chief Operating Officer	Andrew Lawry	Heron Resources	Responsible for Project delivery and operations	02 9119 8111
Project Manager	To be appointed	Heron Resources	Construction Project Management and	02 9119 8111

			Implementation	
Manager Mining Engineering	To be appointed	Heron	Mine Planning and Design	02 9119 8111
General Manager	Brian Hearne	Heron Resources	Conduct of Mining Operations	02 9119 8111
Exploration Manager, Chief Geologist	David von Perger	Heron Resources	Resource Evaluation	02 9119 8111
Environmental Manager	Robert Byrnes	IEC	Conduct of environmental management and compliance	02 4878 5502
Woodlawn Mine Environmental Officer	Zoe Reed	Heron	On site environmental management	02 9119 8111

The above table will be updated as required during both construction and operational phases. Addition positions will be made once the project is operational and it is anticipated that this would include management responsibility for transport operations.

1.4 Company Structure

The Woodlawn Project will be developed by Tarago Operations Pty Limited (Tarago Operations), a wholly owned subsidiary of Heron Resources Limited (Heron) which merged with TriAusMin Limited who was the original proponent for the Project.

The Woodlawn Project will be developed as a “Greenfield Project” despite its long history and existing infrastructure. The construction program will be managed by Heron using construction contractors. Once commissioned, the new facility will be operated by Heron through its subsidiary Tarago Operations.

1.5 Legislative Requirements

Of relevance to the transport management of the Project is the adherence to the *Australian Code for the Transport of Dangerous Goods by Road and Rail* 2015 which comes compulsory from 1 January 2017. The Code is aligned to the United Nations recommendations on the Transport of Dangerous Goods Model Regulations (18th edition) and also includes specific provisions that better reflect current Australian practices and conditions.

The Code is a technical resource to help Australia’s transport and logistics industry to operate safely when carrying dangerous goods. It is important that all members of the supply chain understand and work to the requirements of the Code, including the consignor, packer, truck driver and dangerous goods transport companies, along with dangerous goods professionals and trainers.

The Code applies to the dangerous goods classified as:

- gases, Class 2;
- flammable liquids, Class 3;
- flammable solids, self-reactive and desensitized explosives, Class 4.1;

- substances liable to spontaneous combust, Class 4.2;
- substances dangerous if wet, Class 4.3;
- oxidising substances, Class 5.1;
- organic peroxides, Class 5.2;
- toxic substances, Class 6.1;
- infectious substances, Class 6.2 (in NSW and Queensland only);
- corrosive substances, Class 8; and
- miscellaneous dangerous substances and articles and environmentally hazardous substances, Class 9.

The Code details the requirements for classification of substances, packaging and performance testing, use of bulk containers, IBCs, freight containers and unit loads, marking and placarding, vehicle requirements, segregation and stowage, transfer of bulk dangerous goods, documentation, safety equipment and procedures during transport emergencies.

The Woodlawn Project will require the transport to the site of several classes of Dangerous Goods including explosives and chemical reagents that would be classed as toxic and/or flammable as well as the transport of concentrates to port for export.

Local roads leading to the Hume Highway are covered by the **Roads Act 1993** and works will be subject to a Road Transport Protocol in accordance with Condition 26 of the Project Approval. The Protocol requires monitoring of the trucking and be prepared in consultation with Council and Roads and Maritime Services.

The construction of the mine access road intersection with Collector Road has been separately approved by Goulburn Mulwaree Council in accordance with Section 138 of the Roads Act 1993 and will be constructed in accordance with a separate and approved Traffic Management Plan. This specific intersection construction management plan is provided as Appendix B while the approved design is provided in Appendix C.

1.6 Project Approval Requirements

The Woodlawn Project received Project Approval on 4th July 2013 with subsequent modifications received on 22nd April 2016 and 6th July 2017. The approval was obtained under the provisions of Part 3A of the Environmental Assessment Act 1979 and following the public exhibition of an Environmental Assessment document.

The EA contained a number of environmental commitments while the Project Approval was also subject to conditions. Specifically, the conditions and Proponent commitments relating to the preparation of a Transport Management Plan is as follows:

Table 2 - Consent Conditions Relating to Noise and Blasting

Condition	Description	Where Addressed
Sch 2 Condition 5	transport more than 150,000 tonnes of concentrate from the site in a calendar year	Noted
Sch 2 Condition 7	The Proponent shall transport all concentrate from the site via Collector Road (east of the site), the Tarago-Bungendore Road (north of Collector Road), Braidwood Road and the Hume Highway.	Section 2.1

Condition	Description	Where Addressed
Sch 2 Condition 8	Transportation of ore concentrate from the site will be between 7am to 10pm, 7 days per week	Section 2.4
Sch 2 Condition 12	The Proponent shall ensure that all the plant and equipment used at the site, or to transport materials from the site, is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner	Section 3.4
Sch 2 Condition 14	the Proponent shall pay Council: a minimum annual road maintenance payment of \$0.043 per kilometre per tonne for product transported along Council maintained roads in accordance with Council's <i>Section 94 Development Contributions Plan 2009 Amendment No. 2</i> (indexed to inflation)	Section 2.5
Sch 4 Condition 23	Transportation of all dangerous goods to or from the site shall be undertaken in strict accordance with <i>Australian Code for the Transport of Dangerous Goods by Road and Rail</i> .	Section 1.5 Section 3.5
Sch 4 Condition 24	The Proponent shall construct the site access road for heavy vehicles, and associated intersection of this access road, prior to commencing construction of other components of the project on the site. The intersection shall be designed and constructed to the satisfaction of Council and in accordance with the applicable AUSTROADS standards.	Section 2.3
Sch 4 Condition 25	The Proponent shall: (a) keep accurate records of the: <ul style="list-style-type: none"> ▪ amount of copper, lead and zinc concentrate transported from the site (on a monthly basis); and ▪ the date and time of loaded heavy vehicle movements from the site; and (b) provide the Director-General with a summary of these heavy vehicle movements in the Annual Review.	Section 2.3 Section 4.4 Section 5.2 Section 5.2
Sch 4 Condition 26	The Proponent shall prepare and implement a Road Transport Protocol for the project, to the satisfaction of the Director-General. The protocol shall: (a) be prepared in consultation with the RMS and Council; (b) be submitted to the Director-General for approval prior to carrying out any development on the site; (c) include a detailed Transport Code of Conduct that addresses: <ul style="list-style-type: none"> ▪ measures to ensure that heavy vehicles adhere to the designated haulage route in 	Chapter 3 Noted Noted Chapter 3

Condition	Description	Where Addressed
	Condition 7 of Schedule 2; <ul style="list-style-type: none"> ▪ staggering of heavy vehicle departures in consultation with Veolia to minimise impacts on the road network; ▪ driver behaviour including adherence to speed limits, safe overtaking, and maintaining appropriate distances between vehicles; ▪ contingency plans when the designated haulage route is disrupted; and ▪ procedures for ensuring compliance with and enforcement of the Code. 	Section 3.8 Section 3.4 Section 3.2 Section 2.1 and Plan 2 Section 3.10

1.7 Consultation

This Plan has been formulated through a process of consultation with government and non-government organisations. A consultation log is provided in Appendix E which will be updated as required during the construction and ongoing operation of the Woodlawn Mine. The two key agencies are Goulburn Mulwaree Council who control the surrounding road network and Roads and Maritime Services who control the arterial links to the ports.

2. Traffic Management

2.1 Road Network

The Woodlawn mine site will be accessed off Collector Road via a new intersection. As required by Condition 7 of Project Approval 07_0143MOD1, transport all concentrate from the site will be via Collector Road (east of the site), the Tarago-Bungendore Road (north of Collector Road), Braidwood Road and the Hume Highway.

There are a number of small rural roads which connects Collector road to the Federal and Hume Highways however only the following roads are to be accessed by heavy vehicles:

- Collector Road east from the Woodlawn Site;
- Tarago-Bungendore Road;
- Braidwood Road;
- Sloane Street, Cowper Street, Hume Street Goulburn;
- Hume Highway.

As shown on Plan 2, each of these roads is approved for B-double usage. Designated routes from the Hume Highway to either Port Kembla, Port Sydney or Newcastle Port will be followed. These may change from time to time as indicated by NSW Roads and Maritime Service on Restricted Access Vehicle Maps.

Should any of these roads be blocked due to road works or traffic incident, alternative routes must be approved by Heron. An alternative route exists which utilises Collector road to the west of the site entrance. This route requires approval from Goulburn Mulwaree Council prior to being used.

2.2 Transport Impacts

The Project would generate the following movements:

- haulage traffic of metal concentrates (e.g. zinc, copper and lead) from the Project Site to the container Port;
- haulage traffic of consumables (e.g. cement, flotation reagents and lime etc.) from various locations to the Project Site;
- haulage traffic of containerised chemicals to the Project Site;
- the movement of empty trucks to/from the Site as generated by the above activities.

Table 2.1 summarises the expected haulage and truck traffic to and from Project Site.

Table 2.1 Truck and Haulage Traffic Generation

Trip type	Traffic generation	Comments
From Site		
Copper concentrate	2.2 trucks per day	To Port
Zinc concentrate	6.1 trucks per day	To Port
Lead concentrate	2 trucks per day	To Port
To Site		
Cement	10 trucks per week	From Boral – Berrima

Flotation Reagents	1.5 trucks per week	From Container Port
Milling/Crushing Consumables	0.5 trucks per week	From Sydney, Newcastle, Wollongong
Lime	1 trucks per week	From Marulan
Miscellaneous	1 trucks per week	From Container Port
Bulk Chemicals (SMBS)	6 trucks per week	From Port

2.3 Intersection Design and Construction

Access to the development will be via a new T-junction at Collector Road, located on a straight section, approximately 750 metres to the east of the existing access road to the Veolia Site. Access to the existing Veolia Site facility remains as is, via the existing access off Collector Road.

The intersection location and design was determined through consultation with Goulburn Mulwaree Council in accordance with the applicable AUSTRROADS standards. Design drawings covering the intersection have been approved by Council. A copy of the approval under Section 138 of the Roads Act 1993 is provided in Appendix C.

The construction of the intersection will necessarily involve traffic management provisions along Collector Road. These are provided in detail in Appendix B and summarised below:

- Risk mitigation measures covering separation of pedestrians from vehicles, safely separate travelling public from construction activities and separate light vehicles from heavy vehicles.
- Provision of appropriate exclusion zones and priority routes for through traffic along Collector Road.
- Provision of signage and when necessary manually controlled traffic movements.
- Limiting of speed during road works.
- Take a proactive approach to the identification and removal of hazards on the road network associated with the project.
- All personnel involved in the construction project including visitors and contractors must not be under the influence of drugs or alcohol. All drivers can be subjected to random breath testing.
- All construction personnel must confine their movements to designated walkways where practicable.
- All vehicles must be in a roadworthy condition and drivers shall be responsible for the cleanliness of windows, lights and reflectors on any vehicle that they are operating to ensure clear vision.
- There shall be no construction activities within 3m of any two way road without authorisation from the Goulburn Shire Council, Project Manager and Construction Manager.

All vehicles must comply with all traffic regulations and signs placed (all signage must meet AS 1742.15-2007 Manual of Uniform Traffic Control Devices – Direction Signs, Information Signs and Route Numbering and AS 1742.12-2009 Manual of Uniform Traffic

Control Devices – Traffic Control Devices for General Use). Inductions will be provided by both Heron Resources and the construction contractor Sedgman Pty Ltd. Traffic movement around the site will be strictly controlled and will vary according to conditions and construction stages.

2.4 Hours of Operation

Construction activities involving earthmoving equipment and noisy activities will generally occur during day light hours where possible, 7.00am to 7.00pm, 7 days per week.

Once the processing plant is commissioned, this component will operate 24 hours per day 7 days per week. The underground operation will also operate continuously in order to feed the processing plant.

Transport of ore concentrate from the site will occur between 7.00 am to 10.00pm, 7 days per week in accordance with the Project Approval.

2.5 Road Contribution

Heron will pay Council a minimum annual road maintenance payment of \$0.043 per kilometre per tonne for product transported along Council maintained roads in accordance with Council's *Section 94 Development Contributions Plan 2009 Amendment No. 2* (indexed to inflation). The payment will be made based on product dispatch records maintained on site. This aspect has been discussed with Council and payments are anticipated to occur in the fourth quarter of 2018.

3. Transport Code of Conduct

The purpose of this Protocol is to:

- Ensure compliance with the Project Approval;
- Maximise public safety at all times; and
- Minimise impacts on other road users.

It is recognised that Heron has the ability to control and influence contracted truck companies by using specific contract conditions which include this protocol. However it is also recognised that it has limited ability in relation to irregular transport or transport organised by third parties. Heron will include key relevant aspects of this protocol as a condition of Purchase Orders for goods and will monitor adherence to these conditions.

3.1 General Requirements

Heavy vehicle drivers hauling from Woodlawn mine must:

- Have undertaken a Site Induction carried out by an approved member of the Heron staff or suitably qualified person under the direction of the mine management;
- Hold a valid driver's licence for the class of vehicle being operated;
- Operate the vehicle in a safe manner within designated area of the mine site including concentrate dispatch, workshop and stores areas;
- Comply with the direction of authorised site personnel when within the site;
- Comply with all road rules and legislation governing heavy vehicle usage on public roads.

3.2 Heavy Vehicle Speed

The following speed restrictions apply in relation to the Woodlawn Mine:

- Speed limit of 40 km/hr on the main access road to Collector Road;
- Speed limit of 20 km/hr on all other internal access roads from the concentrate loading area and weighbridge approach road;
- Speed limit of 40km/hr when proceeding past stationary school buses using Collector Road to Tarago-Bunendore Road and Braidwood Road; and
- All heavy vehicles travelling to or from the mine site must obey designated truck speed limits.

Drivers are to observe and not exceed the posted speed limits on all public roads, with speed adjusted appropriately to suit the road environment and prevailing weather conditions, to comply with the Australian Road Rules. The vehicle speed must be appropriate to ensure the safe movements of the vehicle based on the vehicle configuration.

Vehicle speed on public roads is enforced by the NSW Police Service. In addition, all drivers and truck operators working for or on behalf of Woodlawn Mine are to be made

aware of the “Three Strikes Scheme” introduced by the Roads and Maritime Services which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15 km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the Roads and Maritime Services will record a strike against that vehicle. If three strikes are recorded within a three year period, the Roads and Maritime Services will act to suspend the registration of that vehicle (up to three months).

3.3 Driver Fatigue

Fatigue is one of the biggest causes of crashes for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was developed by the National Transport Commission (NTC) and approved by Ministers from all States and Territories in February 2007. The heavy vehicle driver fatigue law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that can apply).

The National Heavy Vehicle Accreditation Scheme allows heavy vehicle operators the choice of operating under three fatigue management schemes: Standard Hours of Operation; Basic Fatigue Management (BFM); and Advanced Fatigue Management (AFM). All heavy vehicle drivers operating out of the Woodlawn Mine are to be aware of their adopted fatigue management scheme and operate within its requirements.

Fatigue includes (but is not limited to) the following:

- Feeling sleepy.
- Feeling physically or mentally tired, weary or drowsy.
- Feeling exhausted or lacking energy.
- Behaving in a way consistent with any of the above.

3.4 Heavy Vehicle Control

In order to minimise the impact of noise from truck transport, the following controls apply to truck operators at Woodlawn Mine:

- Compression brakes not to be used in the vicinity of Tarago and Lake Bathurst villages;
- Tailgates, chains and any loose cables must be locked and secured to avoid noise or spillage;
- Always observe the posted speed on site and the local road network;
- No tailgating is permitted – a 3 second gap is to be observed at all times;
- Drivers should avoid using road shoulders to assist passing vehicles;
- Equipment to be used must be fit for purpose.

All trucks used under contract with Heron must be maintained in a safe and fully compliant condition. Evidence of maintenance and registration compliance must be made available on request. As specified in Condition 12 Schedule 2 of the Project Approval, Tarago Operations will ensure that all vehicles, plant and equipment used at the site or to transport material from the site will be maintained and operated in a proper and efficient manner.

3.5 Dangerous Goods Transport

All transport to and from the Woodlawn site is to strictly adhere to the *Australian Code for the Transport of Dangerous Goods by Road and Rail 2015*. All transport contractors must demonstrate that they have met the rules and recommendations covering:

- the definition, classification, packaging, marking and labelling of substances and articles that meet the United Nations classification criteria for dangerous goods or are prescribed as dangerous goods by the competent authority;
- the consigning of dangerous goods for transport, including loading, stowage, load retention and segregation;
- the provision of transport documentation describing the dangerous goods being transported, and appropriate emergency information for those goods;
- the unloading, receipt and transfer of dangerous goods;
- the transport of dangerous goods; including the use of vehicles, containers and equipment, and the provision of safety equipment.

Heron will require each transport contractor to provide documentary evidence of compliance. Approval to transport oversized or overweight vehicles will be sought from RMS Special Permits Unit in Glen Innes on 1300 656371.

3.6 Construction Transport

The construction program will commence initially with the mobilisation of earthmoving equipment and erection of temporary contractor facilities. This will involve approximately 20 heavy vehicle movements per day at a rate of around 2 per hour over a 12 hour period. Some oversized vehicles will be required for plant and equipment and specific RMS requirements will be adhered to.

Approval to transport oversized or overweight vehicles will be sought from RMS Special Permits Unit in Glen Innes on 1300 656371.

All vehicles are to be inspected by the operator for cleanliness prior to leaving the site during the construction phase. Any materials that could fall on the road should be removed prior to leaving the site.

3.7 Load Covering and Containment

All concentrates will be transported in specially designed containers which will be the responsibility of Heron Resources to maintain and manage. All other goods and chemicals delivered to the site will need to meet packaging requirements of the *Australian Code for the Transport of Dangerous Goods by Road and Rail 2015*.

3.8 Truck Dispatch

The Woodlawn Project Approval requires that heavy vehicle departures are staggered to minimise impacts on the road network. Heron will consult with Veolia on a regular basis in relation to its truck movements between the Crisps Creek Intermodal and the Bioreactor

site. Where possible, concentrate dispatch times will avoid peak train arrivals and unloading.

Concentrate dispatch will generally be limited to one movement per hour and will generally be equally dispersed through the day. In the event that product dispatch is bunched up then trucks will be released over the weighbridge with a 3 minute delay.

Trucks are not to bunch up as they travel through the villages of Tarago and Lake Bathurst. The 3 minute delay between concentrate trucks must be maintained at least to the Hume Highway.

3.9 Vehicle Washdown Facility

An automated vehicle washdown facility will be located near the main site entrance for use by trucks dispatching concentrate as well as site vehicles as necessary prior to leaving the premises. The facility will be sized to suit 2.5 m wide vehicles and include a concrete drive through wash area with separate water treatment and recycling system. The purpose of the facility is to avoid tracking of dirt onto public roads and use of the facility will be included in site inductions.

3.10 Interaction with School Buses

School buses are not to be overtaken at any time while travelling. Buses can only be overtaken when they are stationary and only at a speed of 40 km/hr. There are four school zones between the site and the Goulburn bypass road linking to the Hume Highway. Speed zone restrictions are to be observed at all times.

3.11 Compliance and Enforcement

It will be a condition on all Purchase Orders issued by Woodlawn Mine that drivers and operators adhere to this TMP. Key aspects of the TMP will be listed including transport routes, adherence to speed limits and general road rules, weight restrictions, vehicle compliance and on site road rules and access.

Records will be kept of compliance with these requirements and in the event of noted or recorded breaches of the conditions of the purchase order, the delivery contractor will be first warned and then if another breach is noted, will be banned from the site.

The lead construction contractor will take responsibility for enforcing and auditing the traffic management provisions during the construction program. This will be reported to Heron Resources (Tarago Operations) on a monthly basis. Following completion of construction, Tarago Operations will assume responsibility for both onsite and offsite transport. Compliance monitoring of the ongoing operation will include:

- Random audits with at least two per 12 month period over the first 24 months following first concentrate shipment. The audits will include inspection of paperwork covering appropriate transport approvals, dangerous goods compliance and vehicle inspections.

-
-
- Review of complaints register to determine if traffic related complaints have been received and that they have been closed out successfully.
 - Inspection of load restraints on delivery of goods to the store.
 - Seeking feedback from the Community Consultative Committee in relation to traffic related issues.

The results of these audits and reviews will be included in the Annual Review and placed on Heron's web page.

4. Communication and Reporting

Effective communication with government agencies, the workforce, transport contractors and the community are important features of the overall Environmental Management Strategy for the Woodlawn Mine and therefore a key component of each Environmental Management Plan.

4.1 Community and Government Liaison

Heron is aware of its community obligations and the need to keep lines of communication open. Ongoing government authority and community consultation has been maintained as part of the re-opening of the mine. Heron is committed to continue this consultation work with key government and community stakeholders. The consultation process has, and will continue to include key stakeholders including Goulburn Mulwaree Council and the Roads and Maritime Services.

4.2 Community Complaints

Heron currently maintains a community complaint register that identifies actions required to resolve community issues. The main phone line advertised in the white pages is the designated community complaints line and is answered at all times during hours of operation. The complaints system includes truck transport to and from the site. The complaints register will record the following details:

- Complainant name and contact details.
- Nature of the complaint (noise, dust, traffic etc).
- Time and date of the complaint.
- Specifics of the complaint.
- Actions taken to resolve the complaint.
- Confirmation that the complaint has been resolved.

In the event that an issue is unresolved, the register will include details of the outstanding issues and any actions that are required. It is recognised that some issues may not have a simple resolution and have resulted in multiple complaints. These form part of the ongoing environmental improvement program for the operation.

All complaints received will be noted at each Community Consultation Committee (CCC) meeting and recorded. Any additional complaints or issues raised at the CCC will also be documented and actioned in accordance with the current CCC format.

4.3 Public Access to Information

The complaint register will be made available on Heron's web page. Actions required to resolve these matters will also be made publicly available within 2 weeks. This data will include complaints made in relation to truck transport and may include the contractors company details and any corrective action required in response to the complaint.

4.4 Record Keeping and Reporting

Records of product dispatch, both volume of each concentrate and truck numbers will be recorded and reported in the Annual Review. This data is publicly available and will be hosted on Heron's web page.

5. Verification and Corrective Action

This TMP forms a component of the overall Environmental Management System (EMS) for the Woodlawn Mine Project. An essential component of the EMS is verification and implementation of corrective actions as required to achieve the requirements of the Project Approval and Environment Protection Licence.

5.1 Transport Related Monitoring

Under this TMP, the following records will be kept:

- Records of heavy vehicle deliveries during the construction phase.
- Volumes of concentrate leaving the site on at least a monthly basis for reporting purposes.
- Weighbridge records.
- Records of truck driver training and inductions.

5.2 Reporting Procedures

All environmental monitoring and inspections specified in this TMP will be recorded in a central location and available to the Mine Manager, who in consultation with the site Environmental Manager, will review the data on a monthly basis. A summary of the data is provided to regulatory authorities (Council, RMS and DPE) as required by statutory approvals. Other data collected as part of projects or auditing procedures are reported internally in accordance with the EMS verification procedures.

The Annual Review will include a summary of all transport related data and will be provided to the following agencies:

- NSW Planning and Environment - Division of Resources and Geoscience
- NSW Planning and Environment.
- WaterNSW.
- Department of Primary Industries – Water.
- Goulburn Mulwaree and Palerang Councils.
- Office of Environment and Heritage.
- NSW Environment Protection Authority.
- NSW Roads and Maritime Services.

The Annual Review will provide a summary of all environmental monitoring data collected during the reporting period and compare these with the stated objectives and targets. The Annual Review will also provide a discussion on the monitoring results including an assessment against performance criteria and rehabilitation objectives.

5.3 Environmental Training

All drivers under contract to transport concentrate from the site will be fully inducted and instructed on the contents of this TMP. All other delivery drivers or miscellaneous truck

access will be instructed at the entrance gate and provided directions to the workshop and stores area.

Adequate sign posting will be provided from the access gate to the delivery area and all operators will be informed that their behaviour on site will be monitored.

5.4 Management Review

The overall EMS has provisions for management review to identify any weaknesses or out of date procedures. The aim is to maintain the EMS and component Management Plans in line with current industry and Australian standards and changes to environmental legislation.

This TMP will be reviewed on an annual basis to determine if modifications or updating is required. Any updated revisions to this TMP will be provided to the Council, RMS and DPE.

5.5 Continuous Improvements

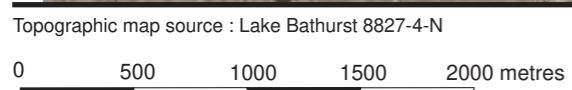
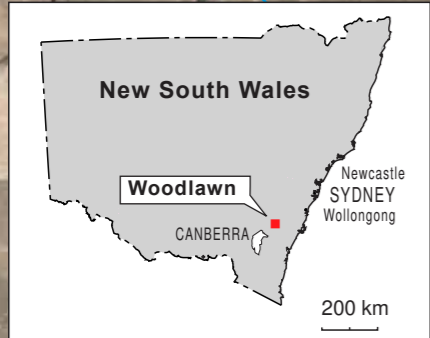
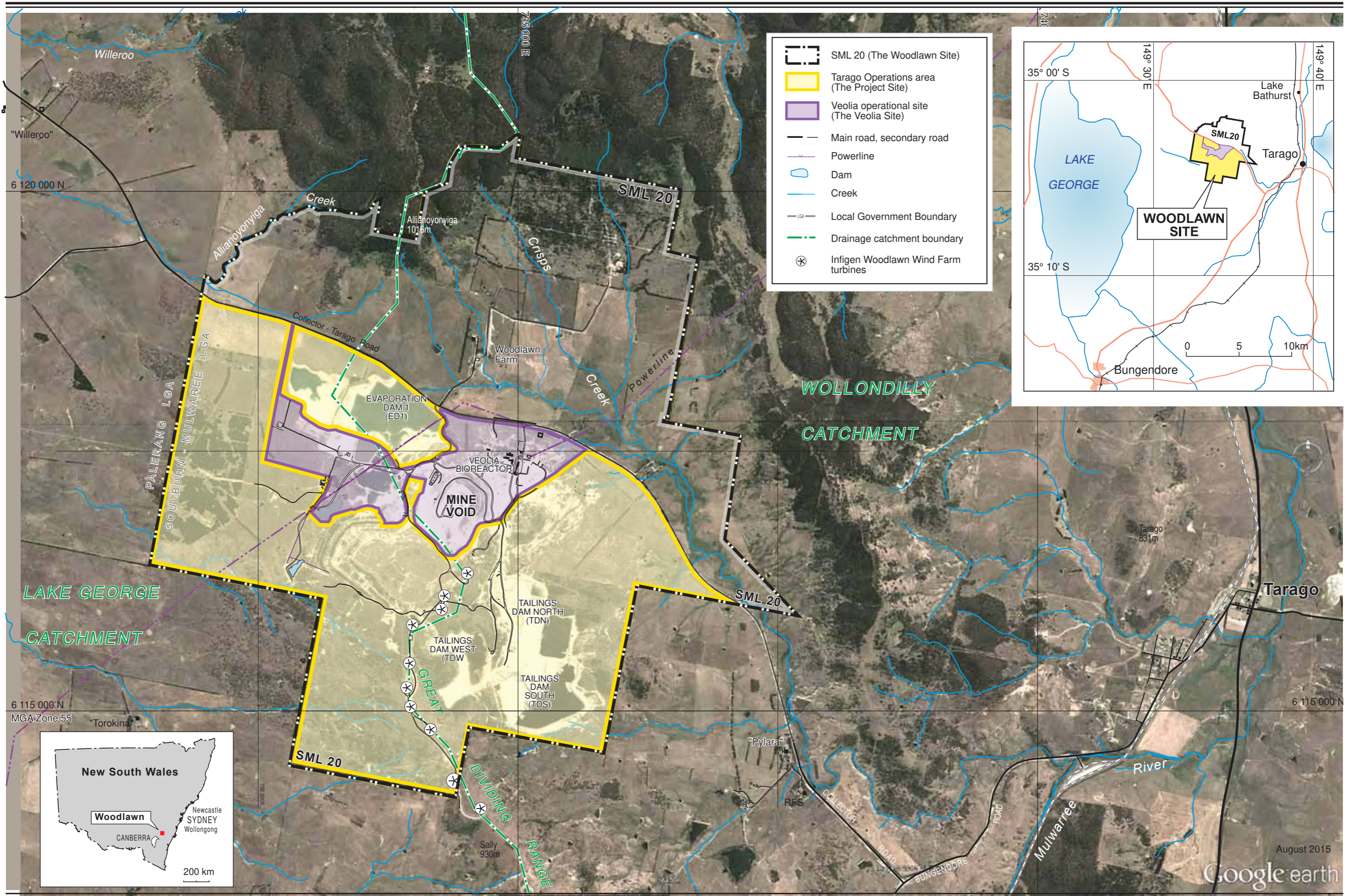
A key component of the EMS is the commitment to continuous improvement. This will be measured by formal and informal criteria. Formal measures will include internal and external inspection and action plans. These reports will be used to establish trends in non-compliance and environmental performance. The level of non-compliance with both statutory and company standards will then be summarised in the Annual Review.

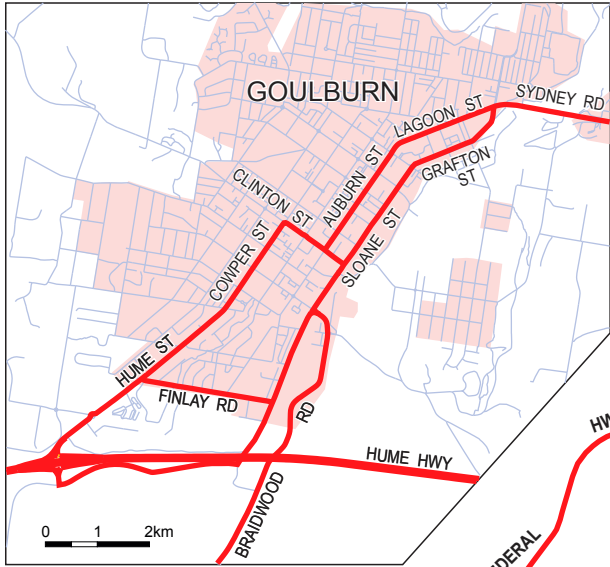
The auditing will also provide an assessment of general transport operations including level of complaints, delivery times and driver behaviour. This information will be used to provide a general trend in environmental performance and determine if upgrading or modification is required to the TMP.

The key measure of continuous improvement in transport will be the level of traffic related incidents including community complaints. These results will be compared over time and in response to changes to the TMP in order to achieve the objective of continuous improvement.

This TMP recognises that traffic related noise is a general Occupational Health and Safety consideration and excessive noise generated on site or in local villages may result in additional controls being necessary. Achieving the stated objectives in this TMP will alleviate the potential impacts on the community and the travelling public.

Appendix A - Plans





149° 40'E

34° 50' S

35° 00' S

35° 10' S

FEDERAL HWY

LAKE GEORGE

WOODLAWN SITE

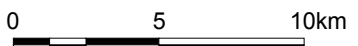
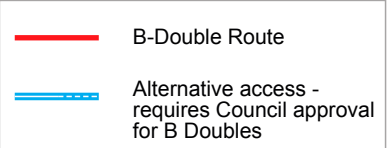
SML20

Lake Bathurst

Tarago

BUNGENDORE RD

BUNGENDORE



Appendix B - Traffic Management Plan - Collector Road Intersection Construction



Woodlawn Copper Project

Traffic Management Plan

Collector Road Intersection Works



Heron Resources

Heron Resources

Document No.: A719-P01-03200-PA-0162 - PN/ba
Revision: 0

Revision Status

Revision Number	Author	Description	Date	Approved By
0	PN	Issued for approval	10-Apr-2017	PN
1	PN	Updated for Collector Road 100km/hr speed limit	11-May -2017	PN

Distribution

Company Name	Contact Name	Revision	Date
Heron Resources	Andrew Lawry	0	10-Apr-2017

Head Office

Level 2, 2 Gardner Close
Milton QLD 4064
AUSTRALIA

Postal Address

PO Box 1801
Milton QLD 4064

+61 7 3514 1000
mail@sedgman.com
www.sedgman.com

Copyright Notice

Sedgman © 2017

This Document is copyright. Other than for the purposes and subject to the conditions prescribed under the Copyright Act 1968 (Commonwealth), no part of it may in any form or by any means (electronic, mechanical, micro-copying, photocopying, recording or otherwise) be reproduced, stored in a retrieval system or transmitted without prior written permission.

Table of Contents

1	Purpose	1
	1.1 Management Plan Hierarchy	1
2	Responsibility	2
3	Scope	3
4	Roles and Responsibilities	4
	4.1 General Behaviour	4
	4.2 Drivers Code of Conduct	4
	4.3 Plant - Vehicle Operators	5
	4.4 Employees, Visitors and Subcontractors	5
5	Traffic Control Plan	6
	5.1 Site Hours of Work	6
	5.2 Site Access	6
	5.3 Traffic Management Methods	6
	5.4 Speed Restrictions	8
	5.5 On-Site Monitoring	8
6	Referenced Materials	9

Appendices

Appendix A

Traffic Control Plan for Collector Road Intersection

List of Figures

Figure 1.1: Management Plan interfaces	1
--	---

1 Purpose

This Traffic Management Plan (TMP) details the designated traffic rules for the Construction of the Collector Road Intersection o to provide a safe system for employees, visitors and subcontractors.

The plan provides for the orderly movement of vehicles, pedestrians, loading and unloading of goods, and parking.

The TMP is a sub-plan of the overarching Project Management Plan A719-P01-03200-PA-0110_0, and should be read in conjunction with the other management plans, as detailed below.

1.1 Management Plan Hierarchy

Figure 1.1 provides a summary of the hierarchy of management plans developed for the Woodlawn Project.

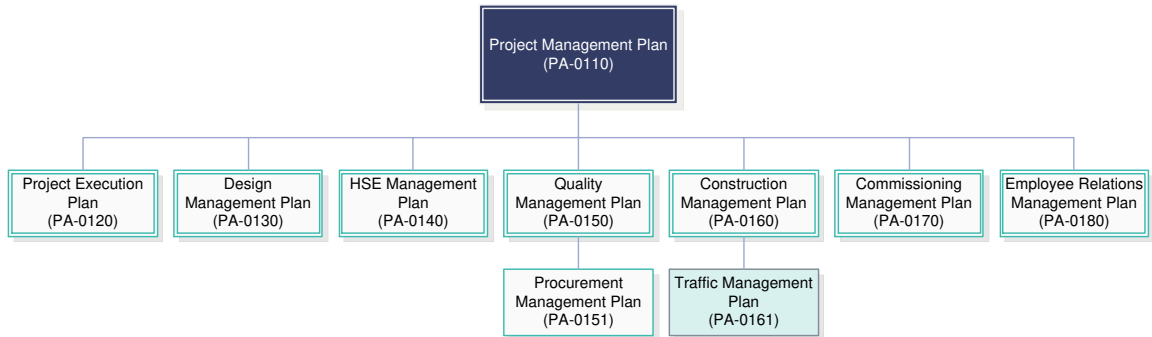


Figure 1.1: Management Plan interfaces

2 Responsibility

The Project and Construction Manager and employees and contractors review this TMP on a regular basis as the needs and issues of the site change and develop. Any changes are subjected to further risk assessments.

Roles and Responsibilities
Project Manager
It is the responsibility of the Project Manager to: <ul style="list-style-type: none">• Review and authorise changes to this document.• Reinforce requirements of this procedure to all personnel.
Area Managers
It is the responsibility of the Area Managers to: <ul style="list-style-type: none">• Issue this procedure and associated documents to subcontractors.• Monitor performance against this procedure.
Staff, Contractors, Delivery Company/Suppliers
It is the responsibility of all to: <ul style="list-style-type: none">• Ensure compliance with this plan.
Document Responsibility
Project Quality Manager

3 Scope

The scope of work involves the construction of the Collector Road Intersection which will be the permanent access road for the Woodlawn Zinc-Copper Project.

The Woodlawn Project is based at the former Woodlawn Mine site located 30 km south of Goulburn and 220 km southwest of Sydney.

This plan applies to all personnel and vehicles involved in any way with the activities outlined in the purpose of this document. It is aimed at mitigating project risks associated with the identified hazards including, but not limited to:

- Requirement to segregate pedestrians from vehicles.
- Requirement to safely separate the public from the construction activities
- Requirement to separate light vehicles from mobile equipment.
- Traffic volumes, including routes, priority and exclusion zones.
- Signage.
- Lighting and visibility.
- Speed limits.
- Parking.

These risks will need to be managed during the course of Intersection work Construction Activities including but not limited to:

- Civil construction including excavations, haulage, surveying and dust suppression.

The Sedgman TMP will ensure that it is compliant with all client, regulatory, local government and environmental requirements. Any changes to any of these will require this TMP to be reviewed and updated as required.

4 Roles and Responsibilities

It is the responsibility of all vehicle operators to:

- Ensure that first and foremost they have been authorised and are deemed competent to operate the vehicle on the site.
- Not be under the influence of drugs or alcohol whilst operating vehicles or plant.
- Ensure that the vehicle they are operating is safe to operate.
- Ensure that the vehicle is suitable for the task to be conducted.
- Report any damage or fault to the vehicle to the Supervisor for immediate corrective action.
- Ensure the appropriate licence is held for the operation of the vehicle
- Observe the TMP for the site at all times
- Be aware of pedestrian interaction whilst operating a vehicle
- Give way to pedestrians in designated areas at all times
- Obey the directions of the Traffic Controllers
- Report any incidents and assist in the implementation of corrective actions.

4.1 General Behaviour

All persons on the Project site shall:

- Follow all transport rules.
- Wear seat belts or restraints where fitted when in an operating vehicle.
- Take a proactive approach to the identification and removal of hazards on the road network associated with the project. If not competent or authorised to remove the hazard, steps shall be taken to ensure the hazard is clearly identified so it does not cause damage or injury to person or property and report to supervisor immediately.
- Encourage peers to adhere to transport rules so as to ensure their safety, and the safety of others.
- Report any breach of this procedure to the relevant supervisor for investigation.

4.2 Drivers Code of Conduct

All drivers of light vehicles and mobile equipment are to comply with the following code of conduct:

- Obey all the laws and regulations that apply to vehicles on public and private roads.
- Respect the rights of others, including drivers and pedestrians, to use and share road space.
- Maintain a safe following distance between vehicles.
- Ensure that the vehicle is clean and in good mechanical condition to reduce environmental impacts.
- Not travel in convoys unless under approved escorts.
- Following the designated access routes for the project.
- Abide by all NSW road rules and vehicle regulations.
- Ensure high levels of courtesy.

4.3 Plant - Vehicle Operators

Vehicle operators shall:

- Not be under the influence of drugs or alcohol whilst operating vehicles or plant.
- Ensure that the vehicle they are operating is safe to operate.
- Ensure that the vehicle is suitable for the task to be conducted.
- Report any damage or fault to the vehicle to the Supervisor for immediate corrective action.
- Ensure the appropriate licence is held for the operation of the vehicle.
- Observe the TMP for the site at all times.
- Be aware of pedestrian interaction whilst operating a vehicle.
- Give way to pedestrians in designated areas at all times.
- Report any incidents and assist in the implementation of corrective actions.
- Ensure a minimum of one (1) hour notice is given to the unloading supervisor prior to arrival on site. This includes the notification of any delays so alternate arrangements can be made if needed.
- Obey all signage and directions given by their escort.

4.4 Employees, Visitors and Subcontractors

Employees, visitors and contractors shall:

- Confine their movements to designated walkways, where practicable.
- Stop and look before entering a vehicle designated area.
- Wear appropriate personal protective equipment whilst moving around the site.
- Give way to vehicles in designated areas at all times.
- Report any incident or unsafe practice.

5 Traffic Control Plan

All vehicle movement on-site, too and from the accommodation as well as any other work related movement at any time of the day or night shall comply with this TMP.

Main traffic that will be utilising the site at this time will be:

- Surface mobile equipment (SME) including but not limited to Trucks, Cranes, Loaders, Graders, forklifts etc.
- Light vehicles including passenger mini buses
- Heavy transport vehicles for delivery of equipment
- Mini buses for the transportation of workers to and from the work site.

A copy of the Traffic Control plan for the Collector Road Intersection works is attached in Appendix A.

5.1 Site Hours of Work

Normal construction hours will be from 7am-6pm daily. There will however be traffic on the project site from 0630-1830hrs daily due to arrival and departure from site by the workers.

This TMP will need to be reviewed and modified accordingly to any specific risks associated with these changes.

5.2 Site Access

Site access will be controlled as detailed in the Traffic Control Plan.

5.3 Traffic Management Methods

Active Vehicle Movement:

- All vehicles must comply with all traffic regulations and signs placed (all signage must meet **AS 1742.15-2007 Manual of Uniform Traffic Control Devices – Direction Signs, Information Signs and Route Numbering** and **AS 1742.12-2009 Manual of Uniform Traffic Control Devices – Traffic Control Devices for General Use**).
- All drivers of any vehicle on-site must have completed both the client and Sedgman inductions and been authorised to operate the vehicle on-site. All light vehicles can be operated on the appropriate valid state driver's license.
- All vehicles must be in a roadworthy condition and drivers shall be responsible for the cleanliness of windows, lights and reflectors on any vehicle that they are operating to ensure clear vision.
- There shall be no construction activities within 3m of any two way road without authorisation from the Goulburn Shire Council, Project Manager and Construction Manager.
- All vehicle drivers shall have a 0.00% blood alcohol level whilst operating vehicles on-site. All drivers can be subjected to random breath testing. Refusal to submit to a random breath test will be handled in accordance with Sedgman procedure **HSE-PC-130900 Drug and Alcohol**.
- All construction vehicles shall comply with the following requirements:
 - Flashing amber hazard light (or revolving or strobe light).
 - Two way radio set on designated VHF/UHF channel frequency.
 - Reversing Alarm.

- Reflective signage allowing for easy and positive vehicle identification.
- Unique identification signage on both sides and the rear of the vehicle.
- Yellow writing on black background.
- High visibility flag e.g. whip flag or buggy whip.
- Be fitted with an extinguisher.
- All drivers shall conduct a pre-start inspection (including hire vehicles) of their vehicle prior to utilising the vehicle for the first time during their shift.
- All SME shall have a spotter when they are reversing.
- When road watering is occurring caution should be taken when passing the water truck and when transitioning from wet to dry road surfaces.
- All light vehicles and SME shall have seatbelts attached for all passengers. All drivers and passengers are required to wear their seatbelt when the vehicle is moving.
- Drivers are not permitted to use electronic devices including (iPod's, MP3 Players, etc.) with or without earphones whilst driving.
- The use of a mobile phone whilst driving on site is prohibited (regardless of whether connected to a blue tooth or hands free).
- No smoking is allowed in any Sedgman Limited or hired light vehicle at any time. No smoking is allowed in any subcontractor's light vehicles or SME at any time.

Unattended Vehicles are to be controlled as follows:

- All light vehicles are to reverse park in designated parking areas whilst on-site (refer to the maps attached to this document for the parking areas).
- When parking a light vehicle or SME they must be fundamentally stable and the following shall occur:
 - A driver shall park a vehicle in a manner that does not pose a risk to persons or equipment.
 - Where practical, vehicles should be parked on level ground and clear of traffic flow and visible to other road users.
 - A driver shall not park a vehicle opposite another vehicle on a road. Where close parking is necessary on a road, vehicles shall be parked on the same side of the road.
 - Drivers shall not park a vehicle closer than 10m unless specified by parking requirements from an operating vehicle or machine, other than in a designated parking area.
 - Positive contact with the operator of an operating vehicle/equipment shall be made where access and/or parking of light vehicle is required within 50m, unless specified by client requirements of the operating vehicle/equipment other than in a designated parking area.
 - Drivers of light vehicles shall switch off the amber flashing light before leaving the vehicle unless the vehicle is in a hazardous situation.
 - Cargo barriers and load restraints shall be used for all vehicles designed for carrying loads (other than passengers).
- Vehicles and equipment shall be parked in a manner that is fundamentally stable. It shall never be parked in a manner that will allow unplanned movement. The following conditions shall be complied with to ensure fundamentally stable parking:
 - Activation of the park brake; and
 - Wheels placed in a spoon drain designed for parking equipment; or
 - Vehicle placed over a hump designed for parking; or
 - Wheels turned into a bank, berm, kerb, etc.; or
 - The lowering of implements to the ground with sufficient force to prevent movement shall be considered in combination with the above conditions (if applicable).
- Except where required for operational purposes, engines shall be shutdown prior to alighting from a parked vehicle.

- In the event of an emergency, alternative measures may be required to ensure fundamentally stable parking.

5.4 Speed Restrictions

The speed limits that will apply for the Collector Road intersection construction works are detailed in Appendix A:

5.5 On-Site Monitoring

All Responsible Manager is to ensure the following monitoring occurs:

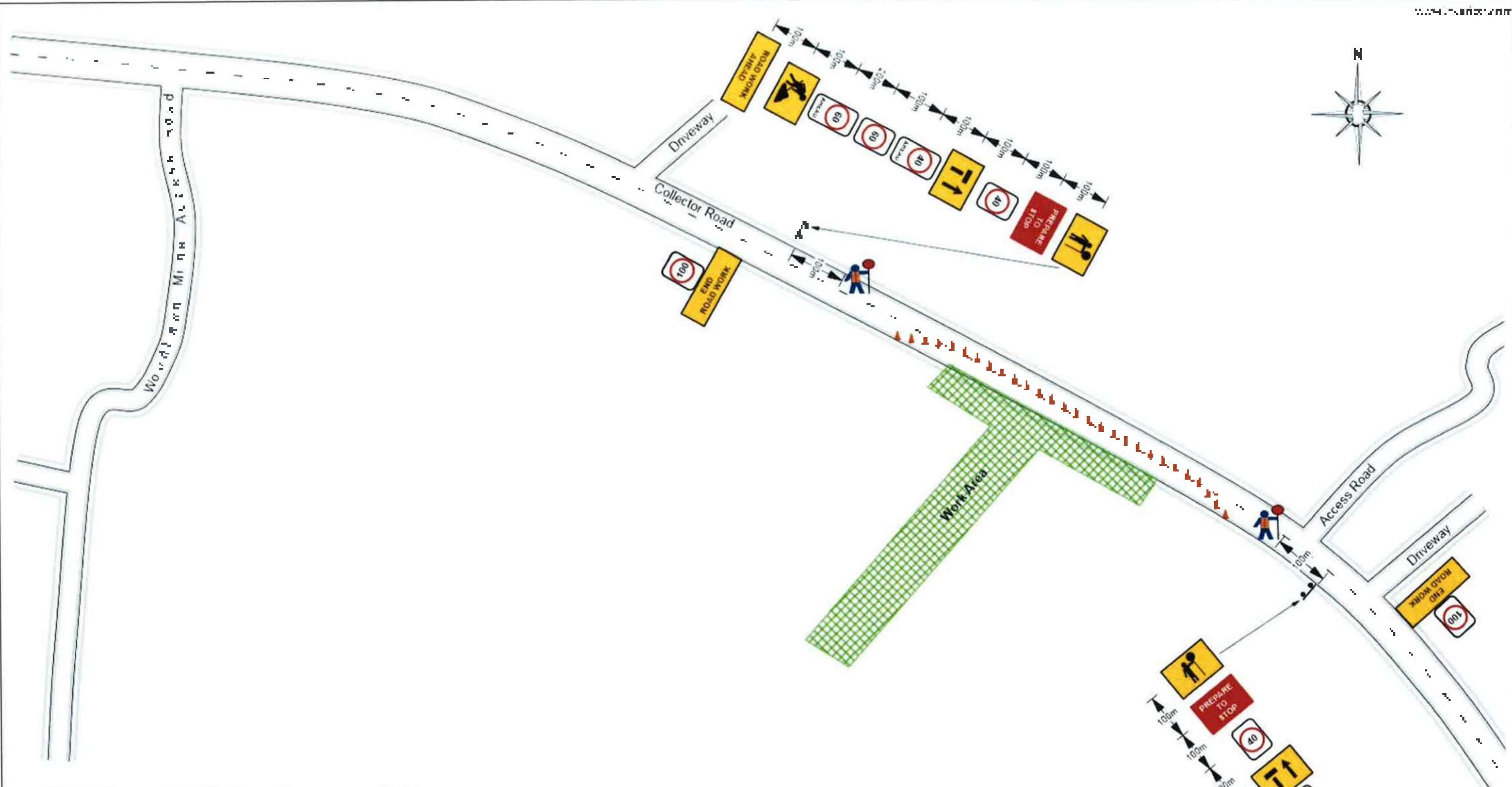
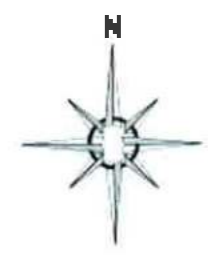
- Testing of blood alcohol and illegal drugs will occur after any event, incident or accident that involves a light vehicle or SME that occurs on the project site. This testing will occur within the guidelines that are set out in the Sedgman site **HSE-PC-130900 Drug and Alcohol** procedure.
- All monitoring of compliance to this TMP will be the responsibility of all Sedgman personnel and each of Sedgman subcontractor's management group. Failure to comply with the TMP may lead to disciplinary action against the individual concerned.
- Dust monitoring shall be conducted.
- All light vehicles shall reverse park in the designated parking areas located around the site.
- Inspections will be conducted of the relevant parking areas and work site to ensure all unattended vehicles are parked as per the requirements of this TMP.

6 Referenced Materials

Referenced Materials	
Guidance	
(put the title and any number reference of the document here)	(any documents that are not referenced in the standard but should be consulted or used in conjunction with this procedure can be listed in this section. If there are no documents then this section can be removed)
References	
Sedgman Standards	
Standard 9	Plant and equipment
Standard 10	Subcontractor Management
Sedgman HSE/Quality Management System	
HSE-PC-120700	Operation of Light Vehicles
HSE-PC-120800	Operation of Surface Mobile Equipment
HSE-PC-120900	Pedestrian and Vehicular Interaction
HSE-FO-122301	Pre-Entry Load Inspection Checklist
HSE-FO-122302	Vehicle Escort Checklist
Standards & Legislation	
National Transport Commission	Load restraint Guide 2004
	Heavy Vehicle Drivers Handbook section 7 VEHICLE DIMENSIONS AND LOADING
AS1470	Health and Safety at work-Principles and Practices Sec 13
BEP-PRO-0046	VISITOR MANAGEMENT, REVISION 11
BEP-PRO-0054	TRANSPORT RULES
Definitions	
Client	Heron Resources
Sedgman or Contractor	Sedgman Limited
Project	Woodlawn Project
Contract	The signed agreement between the Principal and the Contractor to undertake the Project.
Supplier	All suppliers and sub-contractors employed by Sedgman on behalf of the Client to manufacture, fabricate, supply and/or install materials and/or equipment.
Delivery Supervisor	This refers to the person responsible for arranging/accepting the delivery. They will also ensure the compliance of this procedure from the persons involved with the delivery.
Mobile equipment (vehicle)	This includes any mechanically or electrically driven machine capable of moving under its own power and requires a driver. This may also be referred to as a vehicle.
Shall	This means mandatory for the person the instruction is directed to.
Fundamentally Stable	Implies that the vehicle can be left unattended without the possibility of it moving under its own energy, or the influence of gravity, without either the application of the park brake or placing the vehicle in gear or lowering ground engaging implements to the ground.
Appendices	
Appendix A	Traffic Control Plan for Collector Road Intersection


Appendix A

Traffic Control Plan for Collector Road Intersection



Item	Quantity	Unit	Notes
1. Road Work Signs	10	Signs	As per drawing
2. Traffic Cones	100	Cones	As per drawing
3. Safety Barricades	10	Barricades	As per drawing
4. Traffic Lights	10	Lights	As per drawing


 Prepare a Work Zone Traffic Management Plan
 Date: 02/08/2017
 Prepared by: [Name]
 Approved by: [Name]


Date: 02/08/2017 **Author:** [Name] **Version:** 01 **Project:** [Name] **Location:** [Name] **Client:** [Name]
Comments:
 This Traffic Management Plan covers the proposed work at [Location] during the [Time] period. It is intended to ensure the safety of all road users and the efficient completion of the work. The plan is subject to the approval of the relevant authorities and the Traffic Management Plan (TMP) Officer. The plan is to be used in conjunction with the relevant traffic signs and road markings. The plan is to be reviewed and updated as necessary. The plan is to be used in conjunction with the relevant traffic signs and road markings. The plan is to be reviewed and updated as necessary.

- Notes:**
- 1. Traffic signs and road markings to be installed in accordance with the relevant standards.
 - 2. Traffic cones to be used to delineate the work zone and to provide advance warning of the work zone.
 - 3. Safety barricades to be used to provide additional protection for the work zone.
 - 4. Traffic lights to be used to control traffic flow through the work zone.
 - 5. All signs and road markings to be clearly visible and legible.
 - 6. The plan is to be reviewed and updated as necessary.

Appendix C - Intersection Design and Section 138 Approval



NOTICE OF DETERMINATION OF A SECTION 138 APPROVAL

Issued under Section 138 of the Rivers Act 1995

Application No: 8135/C100/16-7

Applicant: Heron Resources

Premises: 507 Collector Road, Tarago

Type of Approval: Construction of new discharge

Issue Period: 01 June 2017 - 01 September 2017

Pursuant to Section 89 of the Local Government Act 1993, notice is hereby given of determination of the above application that has been approved subject to conditions outlined below, as well as conditions outlined in the permit application form.

Conditions:

1. Completion logs must be undertaken and copies of records sent to council
2. Detailed report to be provided to council at the completion of works detailing the works undertaken and including copies of all test reports and photos of the area before, during, and after the works

Handwritten signature of Gil Gillani in black ink.

Gil Gillani
Manager Assets & Design

29/06/17

Appendix D – Project Approval

Project Approval

Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate for the Minister for Planning and Infrastructure, I approve the project application referred to in Schedule 1, subject to the Conditions in Schedules 2 to 6.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Chris Wilson
Executive Director
Development Assessment Systems and Approvals

Sydney

2013

SCHEDULE 1

Application Number:	07_0143
Proponent:	TriAusMin Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	See Appendix 1
Project:	Woodlawn Mine Project

Blue type represents the April 2016 modification

Green type represents the July 2017 modification

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	4
Terms of Approval	5
Limits on Approval	5
Structural Adequacy	5
Demolition	6
Protection of Public Infrastructure	6
Operation of Plant and Equipment	6
Staged Submission of Any Strategy, Plan or Program	6
Developer Contributions	6
ENVIRONMENTAL PERFORMANCE CONDITIONS	7
Tailings Dams	7
Underground Mining	7
Rehabilitation Objectives	8
ENVIRONMENTAL MANAGEMENT CONDITIONS	9
Water Resources	9
Noise	10
Blasting	11
Air Quality	12
Land Management	13
Transport	14
Heritage	15
Visual	15
Waste	15
Bushfire Management	15
ADDITIONAL PROCEDURES	16
Notification of Landowners	16
Independent Review	16
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	17
Environmental Management	17
Reporting	18
Independent Environmental Audit	19
Access to Information	19
APPENDIX 1: SCHEDULE OF LAND	20
APPENDIX 2: PROJECT LAYOUT	21
APPENDIX 3: REVEGETATION AREAS	23
APPENDIX 4: REHABILITATION PLAN	24
APPENDIX 5: NOISE COMPLIANCE ASSESSMENT	25

DEFINITIONS

AWT	Alternative Waste Technology
Annual Review	The review required by Condition 4 of Schedule 6
Approval	This project approval
ARI	Annual Recurrence Interval
BCA	Building Code of Australia
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in Schedules 2 to 6 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval
Council	Goulburn Mulwaree Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
DPI – Water	Division of Water within the Department of Primary Industries
DRG	Division of Resources and Geoscience within the Department of Planning and Environment
DSC	Dam Safety Committee
EA	Environmental Assessment titled ' <i>Environmental Assessment: TriAusMin Woodlawn Project</i> ' dated April 2012 and associated response to submissions titled ' <i>Submissions Report: TriAusMin Woodlawn Project</i> ', dated September 2012, as amended by: <ul style="list-style-type: none"> • modification application and supporting Environmental Assessment titled 'Woodlawn Mine Environmental Assessment: Proposed Modification to Project Approval 07_0143 for the Relocation of the Underground Mine Entry' dated January 2016 and associated response to submissions titled 'Woodlawn Mine Project Application 07_0143 MOD1 Response to Submissions', dated March 2016; and • modification application and supporting Environmental Assessment titled 'Application to Amend PA 07_0143MOD1 - Woodlawn Mine' dated 9 June 2017
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	Environment Protection Authority
EPL	Environment Protection Licence issued under the POEO Act
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
Incident	A set of circumstances that: <ul style="list-style-type: none"> • causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this approval
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in Schedules 5 and 6 of this approval where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining operations	Includes the removal of waste rock and the extraction, processing, handling storage and transportation of ore material from the WRP and WUP
Minister	Minister for Planning, or delegate
Minor	Small in quantity, size and degree given the relative context
Mitigation	Activities associated with reducing the impacts of the project prior to or during those impacts occurring
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
OEH	Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or a mining company (or its subsidiary)
Project	The project described in the EA
Proponent	TriAusMin Limited, or any other person or persons who rely on this approval to carry out the development that is subject to this approval
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
RMP	Rehabilitation Management Plan
RMS	Roads and Maritime Services
Secretary	The Secretary of the Department, or nominee and/or delegate
Site	The land within the project boundary defined in Appendix 1

Veolia	Veolia Environmental Services Pty Ltd which operates the <i>Woodlawn Waste Facility</i> (06_0239) and the <i>Woodlawn Bioreactor and Crisps Creek Intermodal Facility</i> (10_0012)
WRP	Woodlawn Reprocessing Project
WUP	Woodlawn Underground Project

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

TERMS OF APPROVAL

1. The Proponent shall carry out the project generally in accordance with the:
 - (a) EA; and
 - (b) conditions of this approval.
2. 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.
3. The Proponent shall comply with any reasonable requirement/s of the [Secretary](#) arising from the Department's assessment of:
 - (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.
4. 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.

LIMITS ON APPROVAL

Mining Operations

5. The Proponent may carry out mining operations on the site until 31 December 2034.

Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of both the [Secretary](#) and the Department of Resources and Energy. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

Ore Extraction and Processing

6. The Proponent shall not:
 - (a) process more than 1.5 million tonnes of tailings and/or ore on the site in a calendar year; or
 - (b) transport more than 150,000 tonnes of concentrate from the site in a calendar year.

Transportation

7. The Proponent shall transport all concentrate from the site via Collector Road (east of the site), the Tarago-Bungendore Road (north of Collector Road), Braidwood Road and the Hume Highway.

Hours of Operation

8. The Proponent shall comply with the operating hours in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
Construction and rehabilitation	7am to 7pm, 7 days per week
Mining, maintenance and processing operations	24 hours, 7 days per week
Transportation of ore concentrate from the site	7am to 10pm, 7 days per week

STRUCTURAL ADEQUACY

9. 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 and the DSC.

Notes:

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works. Part 8 of the EP&A Regulation sets out the requirements for the certification of the project; and*
- *Under the Dams Safety Act 1978, the Proponent will require a further approval for the project's new tailings storage facility (TSF4).*

DEMOLITION

10. 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.

PROTECTION OF PUBLIC INFRASTRUCTURE

11. Unless the Proponent and the applicable authority agree otherwise, the Proponent shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

OPERATION OF PLANT AND EQUIPMENT

12. The Proponent shall ensure that all the plant and equipment used at the site, or to transport materials from the site, is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM

13. With the approval of the [Secretary](#), the Proponent may:
 - (a) submit any strategy, plan or program required by this approval on a progressive basis; and
 - (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 operations on site are covered by suitable strategies, plans or programs at all times; and*
- *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.*

DEVELOPER CONTRIBUTIONS

14. Prior to the commencement of operations on the site, and during the operational life of the project, unless otherwise agreed by the [Secretary](#), the Proponent shall pay Council:
 - (a) a minimum annual road maintenance payment of \$0.043 per kilometre per tonne for product transported along Council maintained roads in accordance with Council's *Section 94 Development Contributions Plan 2009 Amendment No. 2* (indexed to inflation); and
 - (b) a community enhancement payment of \$1.26 million over the life of the project in accordance with Council's *Section 94A Development Contributions Plan 2009 Amendment No. 2*, to the satisfaction of Council.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

TAILINGS DAMS

Performance Measures

1. The Proponent shall ensure that the:
 - (a) design of all tailings dams on the site is in accordance with the requirements of the Dam Safety Committee under the *Dams Safety Act 1978*;
 - (b) lining of the floor and walls of Tailings Storage Facility 4 achieves a permeability of no less than 1×10^{-9} m/s to a depth of at least 900 millimetres of clay (or equivalent) in accordance with the *EPA's Environmental Guidelines for Solid Waste Landfills*;
 - (c) material used to repair the facilities achieves a permeability of no less than 1×10^{-9} m/s to a depth of at least 900 millimetres of clay (or equivalent) if the floor and walls of Tailings Dams North, South and West require repairing;
 - (d) capping of the tailings dams is generally consistent with the site capping requirements contained in the *EPA's Environmental Guidelines for Solid Waste Landfills*, and achieves a final landform that is safe, long term stable, and suitable for achieving the rehabilitation objectives in Table 2 below;
 - (e) tailings and evaporation dams are maintained with a minimum freeboard of 600 mm or a minimum freeboard sufficient to accommodate a 1 in 100-year ARI, 72-hour rainfall event without overtopping at all times, whichever is greater;
 - (f) the clean water diversion around Tailings Storage Facility 4 shall be designed, constructed and maintained to prevent the flood waters (up to the probable maximum flood level) from entering the facility;
 - (g) source of seepage from Tailings Dam South is indentified and repaired within 3 years of commencing tailings reprocessing operations on the site; and
 - (h) existing seepage collection area is lined with a low permeability geotextile membrane within 1 year of completing the repair work on Tailings Dams South, to the satisfaction of the [Secretary](#).

Alternative permeability and thickness standards for the lining and capping of tailings dams may be acceptable following completion of an appropriate risk assessment undertaken in accordance with the *Environmental Guidelines – Management of Tailings Storage Facilities* (VIC DPI, 2004) - or equivalent, with the written agreement of the Dam Safety Committee, EPA and the [Secretary](#).

Tailings Rehabilitation Strategy

2. The Proponent shall prepare and implement a Tailings Rehabilitation Strategy for the project to the satisfaction of the [Secretary](#). The strategy must:
 - (a) be prepared in consultation with [DRG](#);
 - (b) be submitted to the [Secretary](#) for approval prior to commencement of construction on the site;
 - (c) confirm there would be sufficient capping material to rehabilitate the tailings and evaporation dams;
 - (d) confirm this material would be available in time for the progressive rehabilitation of the tailings and evaporation dams;
 - (e) confirm that the physical characteristics of the capping material would be able to achieve the rehabilitation objectives for the tailings dams and the evaporation dams;
 - (f) confirm the capping material would not result in any additional adverse environmental consequences;
 - (g) confirm that manner in which the compost from the Veolia AWT is proposed to be used on the site is covered by a valid exemption issued by the EPA; and
 - (h) include contingency measures to be implemented if the organic material proves to be unsuitable, including detailed plans of the location, nature and quantity of alternative rehabilitation material to be sourced from the site.

UNDERGROUND MINING

Performance Measures

3. The Proponent shall ensure that:
 - (a) there is *no measurable subsidence* caused by underground mining beneath the Woodlawn Landfill, tailings dams, and evaporations dams on the site;
 - (b) apart from the access decline, no underground mining is undertaken within 200 m of the perimeter of the Woodlawn Landfill;
 - (c) remnant underground voids are long term stable to prevent subsidence; and
 - (d) material used to backfill underground voids is physically and chemically stable and non-polluting.

Extraction Plan

4. The Proponent shall prepare and implement an Extraction Plan for all underground mining at the Woodlawn Mine, to the satisfaction of the [Secretary](#). Each Extraction Plan must:
 - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the [Secretary](#);
 - (b) be approved by the [Secretary](#) before the Proponent carries out any underground mining (excluding construction of the underground access decline) at the Woodlawn Mine that is covered by the Extraction Plan;
 - (c) include detailed plans of existing and proposed underground workings and any associated surface development;
 - (d) describe in detail the performance indicators and the actions that would be undertaken to ensure compliance with the performance measures in Condition 3 above, and manage or remediate any impacts and/or environmental consequences to meet the rehabilitation objectives in Condition 6 below; and
 - (e) include a Subsidence Monitoring Program to assist with the management of the risks associated with subsidence, which validates the subsidence predictions, analyses the relationship between the predicted and resulting subsidence effects, and informs contingency planning and the adaptive management process in the underground workings.

The Proponent shall pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan.

Notes: In accordance with Condition 13 of Schedule 2, the preparation and implementation of Extraction Plans may be staged, with each plan covering a defined area of underground workings. In addition, these plans are only required to contain management plans that are relevant to the specific underground workings that are being carried out.

Paste Fill

5. The Proponent shall commission a suitably qualified expert, whose appointment has been endorsed by the [Secretary](#) to:
 - (a) carry out trials and testing to clarify the physical and leaching characteristics of the paste fill;
 - (b) prepare a program for the ongoing testing of the paste fill to ensure it meets the performance measures in Condition 3 above; and
 - (c) prepare a report on the findings of trials and testing, and submit the report to the [Secretary](#) for approval prior to the commencement of underground mining operations on the site (excluding construction of the underground access decline).

REHABILITATION OBJECTIVES

6. The Proponent shall rehabilitate the site to the satisfaction of the [Secretary](#). This rehabilitation must be generally consistent with the proposed rehabilitation plan described in the EA (and reproduced in Appendix 4), and comply with the rehabilitation objectives in Table 2.

Table 2: Rehabilitation Objectives

Feature	Objectives
Mine site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting with no final voids on the surface • Integrated with the rehabilitation of the Woodlawn Landfill • Revegetated with plant species characteristic of Western Tablelands Dry Forest vegetation community
Underground workings	<ul style="list-style-type: none"> • No measurable subsidence effects on the Woodlawn Landfill, evaporation dams and tailings dams on the site
Surface infrastructure	<ul style="list-style-type: none"> • To be decommissioned and removed, unless otherwise agreed with the Secretary
Waste rock dumps	<ul style="list-style-type: none"> • Any seepage from the waste rock dumps to be contained and treated on the site
Tailings dams	<ul style="list-style-type: none"> • All tailings contained within low permeability structures with no seepage to surrounding areas from tailings dams • Final landform and vegetation cover to be stable, self sustaining, free draining and consistent with surrounding rehabilitated areas
Evaporation dams	<ul style="list-style-type: none"> • Final landform and vegetation cover to be stable, self sustaining, free draining and consistent with surrounding rehabilitated areas
Rehabilitated slopes	<ul style="list-style-type: none"> • All rehabilitated slopes to be less than 10 degrees and free draining (except for the dam walls which are permitted to have a final slope of up to 18 degrees)
Drainage lines	<ul style="list-style-type: none"> • Hydraulically and geomorphologically stable, with vegetation that is in the same condition or better than that which existed prior to mining under this approval
Revegetation area	<ul style="list-style-type: none"> • Establish at least 71 hectares of the Western Tablelands Dry Forest vegetation community shown in Appendix 3.
Community	<ul style="list-style-type: none"> • Minimise the adverse socio-economic effects associated with mine closure

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT CONDITIONS

WATER RESOURCES

Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain all necessary water licences for the project.

Water Supply

1. 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 [Secretary](#).

Water Discharges

2. Except as may be expressly provided by an EPL, the Proponent shall comply with Section 120 of the POEO Act during the carrying out of the project.

Existing Acid Drainage

3. Within 5 years of the date of this approval, the Proponent shall identify the passive system to treat seepage from the existing Waste Rock Dump in consultation with [DRG](#), and implement the preferred system to the satisfaction of the [Secretary](#).

Water Management Plan

4. The Proponent shall prepare and implement a Water Management Plan for the project to the satisfaction of the [Secretary](#). This plan must be prepared in consultation with EPA, [DPI – Water](#), [WaterNSW](#), Infigen Energy and Veolia, by suitably qualified and experienced persons whose appointment has been approved by the [Secretary](#), and submitted to the [Secretary](#) for approval prior to the commencement of mining operations under this approval. This plan must include:
 - (a) a Site Water Balance that includes details of:
 - sources of water supply;
 - water use on site, including any potable water use;
 - water transfers to/from the site; and
 - any off-site water discharges;
 - (b) a Surface Water Management Plan, which includes:
 - baseline data on surface water flow and quality in natural waterbodies that could be affected by the project;
 - a detailed description of the surface water management system on the site, including the:
 - clean water diversions;
 - erosion and sediment controls;
 - water storage structures; and
 - tailings and evaporation dams;
 - (c) design objectives and performance criteria for the following:
 - the surface water management system;
 - tailings and evaporation dams; and
 - waterbodies that could be affected by the project;
 - a program to monitor:
 - the effectiveness of the water management system;
 - surface water flows, quality, and impacts on other water users;
 - potential acid rock drainage from the waste rock dumps;
 - potential seepage from tailings and evaporation dams; and
 - post-closure water quality;
 - (d) a Groundwater Management Plan, which includes:
 - baseline data of all groundwater levels, yield and quality of any privately-owned groundwater bores that could be affected by the project;
 - groundwater assessment criteria;
 - definition of areas of existing groundwater contamination;
 - a program to monitor:
 - existing groundwater contamination identified on the site;
 - impacts on the groundwater supply of potentially affected landowners;
 - the volume of groundwater inflow into the underground workings;
 - regional groundwater levels and quality in potentially affected aquifers;
 - potential groundwater quality impacts from paste fill operations;
 - potential acid rock drainage;
 - potential seepage from tailings and evaporation dams; and
 - the effectiveness of the seepage collection, treatment and storage system associated with the tailings dams, waste rock dumps, evaporation dams and all other water storages that receive contaminated or salt-laden water;

- reporting procedures for the results of the monitoring program;
- (e) a Surface and Ground Water Response Plan that includes:
- trigger levels for investigating any potential adverse surface water and groundwater impacts of the project, including but not limited to seepage of contaminated water from the tailings dams, waste rock dumps, evaporation dams and the Woodlawn Landfill;
 - a protocol for the investigation, notification and mitigation of existing groundwater contamination on the site and any exceedances of the surface water and groundwater assessment criteria;
 - measures to mitigate and/or compensate potentially affected landowners (including compensatory water supply if required);
 - the procedures that would be followed to determine any appropriate action to be taken to mitigate or offset any surface or groundwater impacts caused by the project that constitute material harm to the environment.

Note: The effectiveness of the Water Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 6. Following this review and audit the plan is to be revised to ensure it remains up to date (see Condition 5 of Schedule 6).

Water Management Performance Measures

- 4A The Proponent shall comply with the performance measures in Table 3 to the satisfaction of the Secretary.

Table 3: Water Management Performance Measures

Feature	Performance Measure
Erosion and Sediment - General	<ul style="list-style-type: none"> • Design, install and maintain erosion and sediment controls generally in accordance with the series <i>Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries</i>
Paste Fill Plant	<ul style="list-style-type: none"> • Design, install and maintain the paste fill plant to minimise potential for uncontrolled flows of tailings, materials, chemicals or waters (including but not limited to bunding of the tailings storage tanks) in accordance with the relevant Australian Standards.

NOISE

Noise Criteria

5. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Noise Criteria dB(A)

Receivers	Day/Evening /Night (<i>L_{Aeq}(15-minute)</i>)	Night (<i>L_{A1}(max)</i>)
All residential receivers	35	45

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 mining operations on site under the EPL.

Appendix 6 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Operating Conditions

6. The Proponent shall implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational, low frequency and road noise from the project, to the satisfaction of the Secretary.

Noise Management Plan

7. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. The plan must:
- be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to commencing construction on the site;
 - describe the measures that would be implemented to minimise noise generated by the project, including road noise at the St Andrews Anglican Church;
 - include a monitoring program that:
 - uses attended monitoring to evaluate the performance of the project;

- includes a protocol for determining exceedances of the criteria identified in Table 3;
 - evaluates and reports on the effectiveness of the noise management system on site; and
- (d) describe how noise management and monitoring on the site would be integrated with the Woodlawn Landfill.

BLASTING

Blasting Criteria

8. The Proponent shall ensure that blasting on the site does not cause exceedances of the criteria in [Table 5](#).

Table 5: Blasting Criteria

Location	Time of Blasting	Airblast overpressure (dB_(Lin Peak))	Ground vibration (mm/s)	Allowable exceedance
Residence on privately-owned land	Any time	120	10	0%
	Day	115	5	5% of the total number of blasts over a period of 12 months
	Evening	-	2	
	Night, and all day on Sundays and public holidays	-	1	0%

Note: All blasts are to be designed by a suitably qualified and experienced blasting engineer.

Blasting Hours

9. The Proponent shall comply with the blasting hours in [Table 6](#).

Table 6: Blasting Hours

Activity	Blasting Hours
Surface blasting	9am – 5pm Monday to Friday, excluding public holidays
Underground blasting	Anytime

Blasting Frequency

10. In relation to above ground blasting, the Proponent may carry out a maximum of 1 blast per day, unless an additional blast is required following a blast misfire.

This condition does not apply to blasts required to ensure the safety of the site or its workers, and to minor additional blasts required during the construction of the box cut to access the underground workings.

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.

Operating Conditions

11. During operation of the project, the Proponent shall implement best management practice to:
- protect the safety of people and livestock in the surrounding area;
 - protect public or private infrastructure/property in the surrounding area from any damage; and
 - minimise the dust and fume emissions from any blasting; and
- to the satisfaction of the [Secretary](#).

Blast Management Plan

12. The Proponent shall prepare and implement a Blast Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- be prepared in consultation with the Veolia and Infigen Energy, and submitted to the [Secretary](#) for approval prior to commencing blasting on the site;
 - describe the process for incrementally developing and monitoring blasting design;
 - describe the blast mitigation measures that would be implemented to ensure compliance with the blasting criteria in Table 4; and
 - include a blast monitoring program to evaluate the performance of the project.

AIR QUALITY

Odour

13. The Proponent shall ensure that no offensive odours generated by the project are emitted from the site, as defined under the POEO Act.

Greenhouse Gas Emissions

14. 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 [Secretary](#).

Air Quality Criteria

15. 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 7, 8 and 9 at any residence on privately-owned land.

Table 7: Long term impact assessment criteria for particulate matter

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

Table 8: Short term impact assessment criterion for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 9: Long term impact assessment criteria for deposited dust

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 4 g/m ² /month

However, the criteria listed in Tables 6, 7 and 8 do not apply if the Proponent has an agreement with the relevant owner(s) to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Notes to Tables 6, 7 and 8:

- ^a Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- ^b Incremental impact (i.e. 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, fog, fire incidents or any other activity agreed by the [Secretary](#).

Operating Conditions

16. The Proponent shall:
- implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project; and
 - minimise any visible air pollution generated by the project; to the satisfaction of the [Secretary](#).

Air Quality Management Plan

17. The Proponent shall prepare and implement an Air Quality Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- be prepared in consultation with the EPA, and be submitted to the [Secretary](#) for approval prior to commencing construction on the site;
 - describe the measures that would be implemented to ensure compliance with Conditions 13 to 16 above;
 - include an air quality monitoring program that:
 - uses a combination of high volumes samplers and dust deposition gauges to evaluate the performance of the project; and

- includes a protocol for determining exceedances of the relevant conditions of this approval; and
- (d) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site.

Meteorological Monitoring

18. 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 complies with the requirements in the *Approved Methods for Sampling of Air Pollutants* in New South Wales guideline.

LAND MANAGEMENT

Waste Rock Management Plan

19. The Proponent shall prepare and implement a Waste Rock Management Plan to the satisfaction of the [Secretary](#). The plan must:
- (a) be developed in consultation with [DRG](#), EPA and [DPI – Water](#);
 - (b) be submitted for the approval of the [Secretary](#) prior to commencing underground mining operations;
 - (c) include a detailed description of the procedures to be implemented to monitor and manage potential acid forming material, including:
 - testing for potentially acid forming waste rock prior to it being brought to the surface;
 - prioritising the relocation of potential acid forming material to suitable underground locations prior to oxidation;
 - using all reasonable and feasible measures to prevent waste rock emplaced underground from further oxidising or causing impacts on groundwater;
 - trigger levels for any material that has oxidised to the extent that it cannot be placed underground without impacting groundwater quality, and procedures for adequate capping and sealing of such material at the surface;
 - effective isolation and/or neutralisation of potential acid forming material in waste rock dumps; and
 - (d) reflect the groundwater and surface water monitoring programs to monitor potentially acid forming waste rock and any leachate generated, including appropriately designed detection and response systems for acid generation (covering monitoring methods, trigger levels and proposed management and/or treatment actions).

Vegetation Management Plan

20. The Proponent shall prepare and implement a Vegetation Management Plan for the project to the satisfaction of the [Secretary](#). This plan must:
- (a) be prepared in consultation with OEH and submitted to the [Secretary](#) for approval prior to commencing construction;
 - (b) describe how the additional 71 hectares of revegetation area (shown in Appendix 3) would be integrated with the overall rehabilitation of the site;
 - (c) describe the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site and in the revegetated area/s; and
 - implement revegetation, including detailed performance and completion criteria;
 - (d) include a detailed description of the procedures to be implemented for:
 - minimising the impacts on fauna on site, including pre-clearance surveys;
 - enhancing the quality of existing vegetation and fauna habitat;
 - restoring native vegetation and fauna habitat on the revegetated area through focusing on assisted natural regeneration, targeted vegetation establishment and the introduction of fauna habitat features, including establishing and maintaining bat habitat for the Eastern Bent-wing Bat and Yellow-bellied Sheath-tail-bat;
 - establishing a revegetation planting density that is consistent with the rehabilitation objectives in Table 2 of Schedule 3;
 - maximising the salvage of resources within the approved disturbance area – including vegetative and soil resources – for beneficial reuse in the rehabilitation of the site;
 - collecting and propagating seed;
 - bushfire management;
 - controlling weeds, feral pests, erosion and access to the revegetation areas; and
 - (e) include a seasonally-based program to monitor and report on the effectiveness of these measures, and progress against the detailed performance and completion criteria; and
 - (f) include details of who would be responsible for monitoring, reviewing and implementing the plan.

Progressive Rehabilitation

21. 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 be permanently rehabilitated until later in the project life.

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.

Rehabilitation Management Plan

22. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Director- General. This plan must:
- be prepared in consultation with the DRG, EPA, DPI – Water, WaterNSW and Council;
 - be submitted to the Secretary for approval prior to carrying out mining operations on the site;
 - be prepared in accordance with any relevant DRG guideline;
 - outline the procedures to be implemented to achieve the rehabilitation objectives in Condition 6 of Schedule 3;
 - outline the operational procedures (including testing, monitoring and performance criteria) used to verify the ongoing suitability of the compost material to be used in rehabilitation;
 - include detailed designs for the short term and long term rehabilitation of tailings and evaporation dams, including surface water management and capping design which takes into account total predicted settlement;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site;
 - 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; and
 - include a program to monitor, independently audit and report on the ongoing effectiveness of the measures and progress towards the detailed performance and completion criteria.

TRANSPORT

Dangerous Goods

23. 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*.

Access Road and Intersection Construction

24. The Proponent shall construct the site access road for heavy vehicles, and associated intersection of this access road, prior to commencing construction of other components of the project on the site. The intersection shall be designed and constructed to the satisfaction of Council and in accordance with the applicable AUSTROADS standards.

Monitoring of Concentrate Transport

25. The Proponent shall:
- keep accurate records of the:
 - amount of copper, lead and zinc concentrate transported from the site (on a monthly basis); and
 - the date and time of loaded heavy vehicle movements from the site; and
 - provide the Secretary with a summary of these heavy vehicle movements in the Annual Review.

Road Transport Protocol

26. The Proponent shall prepare and implement a Road Transport Protocol for the project, to the satisfaction of the Secretary. The protocol shall:
- be prepared in consultation with the RMS and Council;
 - be submitted to the Secretary for approval prior to carrying out any development on the site;
 - include a detailed Transport Code of Conduct that addresses:
 - measures to ensure that heavy vehicles adhere to the designated haulage route in Condition 7 of Schedule 2;
 - staggering of heavy vehicle departures in consultation with Veolia to minimise impacts on the road network;
 - driver behaviour including adherence to speed limits, safe overtaking, and maintaining appropriate distances between vehicles;
 - contingency plans when the designated haulage route is disrupted; and
 - procedures for ensuring compliance with and enforcement of the Code.

HERITAGE

27. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the [Secretary](#). The Plan must:
- (a) be prepared in consultation with OEH and the Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);
 - (b) be submitted to the [Secretary](#) for approval prior to commencing construction on site;
 - (c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;
 - (d) include programs/procedures and management measures for appropriate identification, management, conservation and protection of both Aboriginal and non-Aboriginal heritage items identified on the site.

VISUAL

28. The Proponent shall:
- (a) establish a vegetation screen along the fence line next to Collector Road within 6 months of commencement of construction;
 - (b) implement all reasonable and feasible measures to minimise the visual impacts of the project; and
 - (c) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the [Secretary](#).

WASTE

29. The Proponent shall:
- (a) minimise the waste generated by the project;
 - (b) ensure that the waste generated by the project is appropriately characterised, stored, handled and disposed of in accordance with the *Waste Classification Guidelines* (EPA, 2009), or its latest version; and
 - (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council, to the satisfaction of the [Secretary](#)

BUSHFIRE MANAGEMENT

30. The Proponent shall:
- (a) ensure that the project is suitably equipped to respond to any fires on site; and
 - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the surrounding area.
-

SCHEDULE 5 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. Within two weeks of obtaining monitoring results showing:
 - (a) an exceedence of any relevant noise criteria in Schedule 4, the Proponent shall notify affected landowners and/ or tenants in writing of the exceedence, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria; and
 - (b) an exceedence of any relevant air quality criteria in Schedule 4, 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).

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 4, then he/she may ask the [Secretary](#) in writing for an independent review of the impacts of the project on his/her land.

If the [Secretary](#) is satisfied that an independent review is warranted, then within two months of the [Secretary's](#) decision the Proponent shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the [Secretary](#), to:
 - consult with the landowner to determine his/ her concerns;
 - conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 4; and
 - if the project is not complying with these criteria then identify measures that could be implemented to ensure compliance with the relevant criteria.
 - (b) give the [Secretary](#) and landowner a copy of the independent review.
3. If the independent review determines that the project is complying with the relevant criteria in Schedule 4, then the Proponent may discontinue the independent review with the approval of the [Secretary](#).
 4. If the independent review determines that the project is not complying with the relevant criteria in Schedule 4, then the Proponent shall:
 - (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; or
 - (b) secure a written agreement with the landowner to allow exceedences of the relevant criteria, to the satisfaction of the [Secretary](#).
-

SCHEDULE 6 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 [Secretary](#). This strategy must:
 - (a) be submitted for approval to the [Secretary](#) within 12 months of this approval;
 - (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:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this approval; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

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 Schedules 3 and 4. 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:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (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
- (c) implement remediation measures as directed by the [Secretary](#), to the satisfaction of the [Secretary](#).

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:
 - (a) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria;
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
 - (b) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (c) a program to monitor and report on the:
 - impacts and environmental performance of the project;
 - effectiveness of any management measures (see b above);
 - (d) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
 - (e) a protocol for managing and reporting any:
 - incidents and complaints;
 - non-compliances with statutory requirements and exceedances of the impact assessment criteria and/or performance criteria; and
 - (f) a protocol for periodic review of the plan.

Note: The [Secretary](#) may waive some of these requirements if they are unnecessary for particular management plans.

Annual Review

4. By the end of December each year (or other such timing as agreed by the [Secretary](#)), the Proponent shall review the environmental performance of the project to the satisfaction of the [Secretary](#). This review must:
 - (a) describe the development (including any rehabilitation) that was carried out in the past year, and the development that is proposed to be carried out over the next year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - requirements of any plan or program required under this approval;
 - the monitoring results of previous years; and
 - the relevant predictions in the EA;
 - (c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life 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
 - (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

Revision of Strategies, Plans and Programs

5. Within three months of:
 - (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 9 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 [Secretary](#).

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. The Proponent shall establish and operate a 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 [Secretary](#). This CCC must be operating prior to commencing construction of the project.

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.*

REPORTING

Incident Reporting

7. The Proponent shall notify the [Secretary](#) and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within seven days of the date of the incident, the Proponent shall provide the [Secretary](#) and any relevant agencies with a detailed report on the incident.

Regular Reporting

8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans of the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within one year of commencing construction of the project, and every three years thereafter, unless the [Secretary](#) 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 (including a mine site rehabilitation and water quality expert) whose appointment has been endorsed by the [Secretary](#);
 - (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; and
 - (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.

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the [Secretary](#).

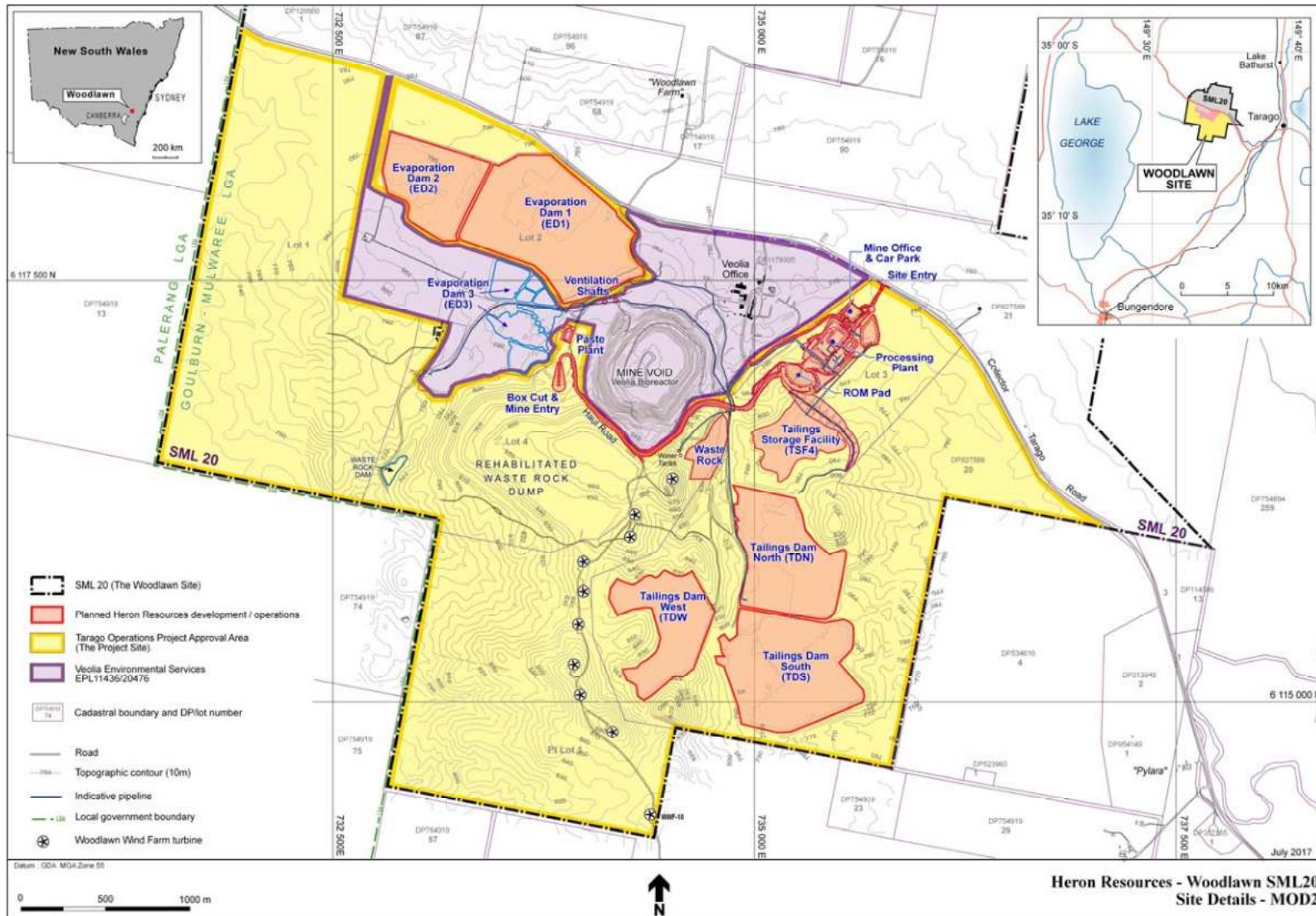
10. Within six weeks of the completion of this audit, or as otherwise agreed by the [Secretary](#), the Proponent shall submit a copy of the audit report to the [Secretary](#), together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

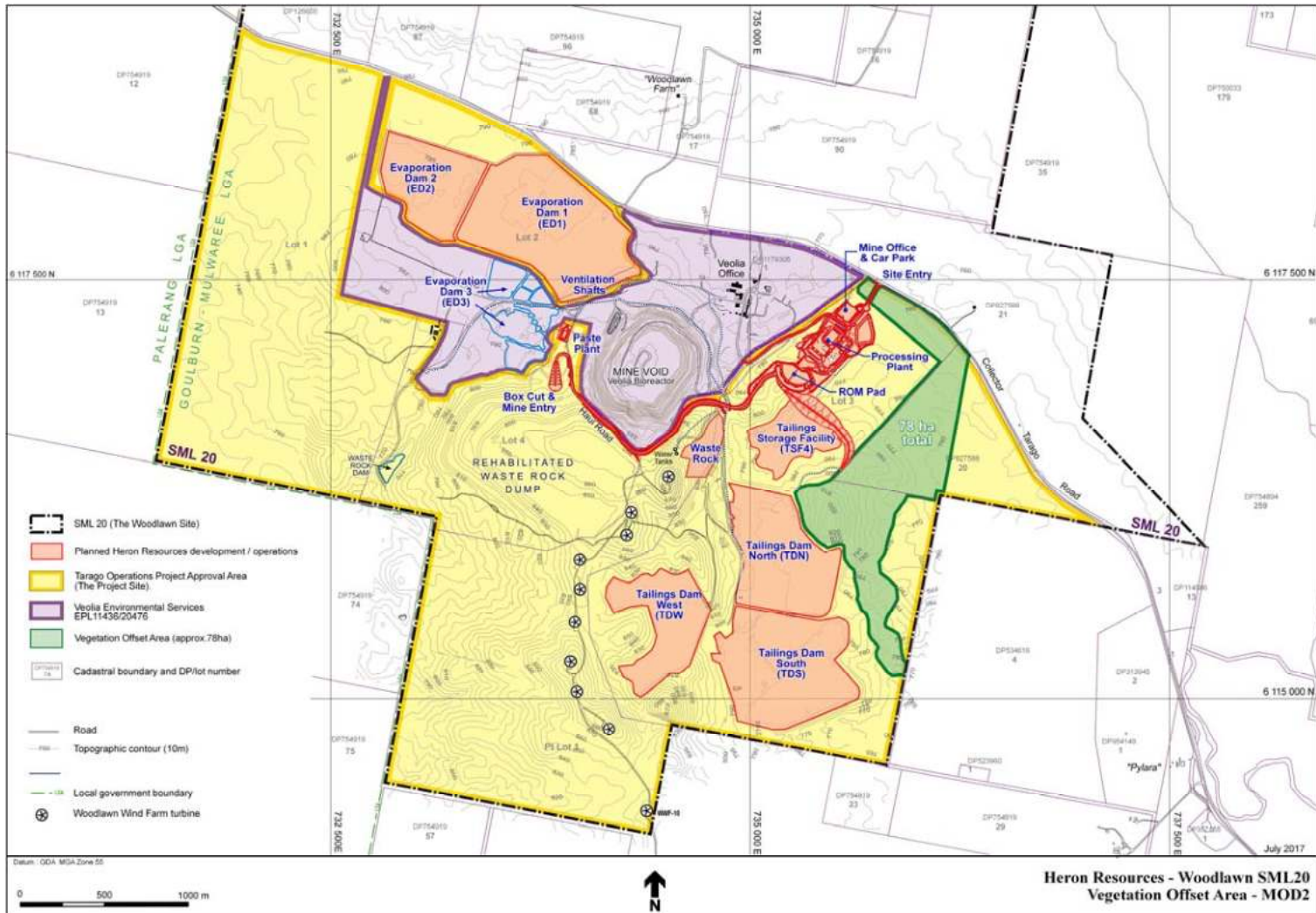
11. Prior to the commencement of construction on the site, the Proponent shall:
- (a) make copies of the following publicly available on its website:
 - the documents referred to in Condition 1 of Schedule 2;
 - all relevant statutory approvals for the project;
 - all approved strategies, plans and programs required under the conditions of this approval;
 - 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;
 - a complaints register, which is to be updated on a monthly basis;
 - minutes of CCC meetings;
 - the annual reviews required under this approval;
 - any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;
 - any other matter required by the [Secretary](#); and
 - (b) keep this information up-to-date, to the satisfaction of the [Secretary](#).
-

**APPENDIX 1
SCHEDULE OF LAND**

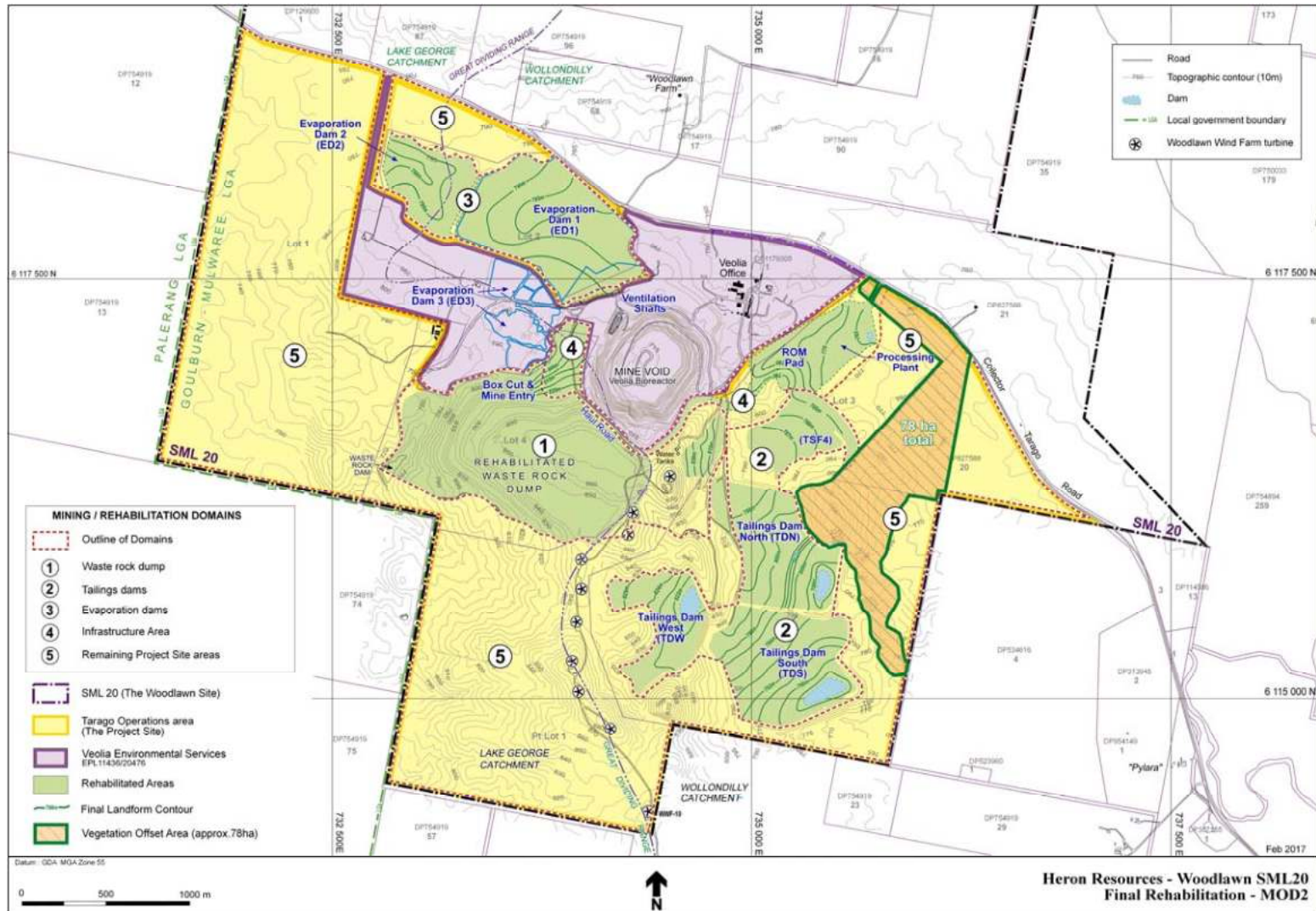
<i>Mine Site (SML 20)</i>	
<i>Lot</i>	<i>DP</i>
19	827588
21	
20	
70	754919
88	
92	
25	
14	
30	
86	
91	



APPENDIX 3 REVEGETATION AREAS



APPENDIX 4 REHABILITATION PLAN



APPENDIX 5 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 3 of the conditions are to apply under all meteorological conditions except the following:
 - (a) during periods of rain or hail;
 - (b) average wind speed at microphone height exceeds 5 m/s;
 - (c) wind speeds greater than 3 m/s measured at 10 m above ground level; or
 - (d) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.

Compliance Monitoring

3. Unless otherwise agreed with the [Secretary](#), monthly attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.
4. Unless otherwise agreed with the [Secretary](#), this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

Appendix E - Consultation Log

Consultation Log - Traffic and Transportation

Date	Form/Agency	Comments and Outcomes	Response/how addressed
28/5/2012	Email from RMS Brian Lefoe	RMS advised that Transport Code of Conduct should include: <ul style="list-style-type: none"> <input type="checkbox"/> Minimise use of road shoulders to allow overtaking <input type="checkbox"/> Avoid any driver behaviour which causes damage to shoulders or encourages unsafe overtaking <input type="checkbox"/> Transporting oversized loads or over mass loads a permit is required from RMS Special Permits Unit in Glen Innes (contact 1300 656371) 	Section 3.4 Section 3.5 Section 3.6
23/7/2014	Meeting with Goulburn City Council	General Management and Planning Manager, general briefing no specific feedback	Noted
30/10/2014	Meeting with Goulburn City Council General Manger, Chief Planner, Traffic Engineer	General briefing on project, update on development progress, discussion of road traffic levy, Veolia's operation and contributions plan, employment opportunities	Noted
9/9/2015	CCC meeting with Council and community representatives	General discussion on project status and contents of management plans. Specific discussion on transport routes, trucking numbers and loading times. Further truck and transport details provided separately to Council to table at a Council Meeting. The preferred haulage route for the Project would extend east along Collector Road before heading north towards Goulburn. Adjoining roads along the preferred haulage route include Collector Road, Bungendore Road, Braidwood Road, Sloane Street, Cowper Street, Hume Street and the Hume Highway.	Section 2.1 Section 2.2 Section 2.5
9/3/16	Meeting with Community Consultation Committee and Council	Presentation to Woodlawn Community Consultation Committee which included overview of project, monitoring program, construction program, workforce numbers, exploration and environmental management plan preparation and content.	Draft EMPs provided on web page for download by committee members
15/2/17	S138 Application	Designs and Traffic Management Plan lodged with Goulburn Council	Approval Issued 29/5/17
9/5/17	Email to RMS	Seeking new contact details for ongoing liaison	Noted
10/5/17	Email to DPE	Traffic Management Plan issued to DPE for comment	Comments received
11/5/17	Email from DPE	Comments received in Traffic Management Plan from DPE: <ul style="list-style-type: none"> S2.1 – Include a figure that shows the approved and contingency access routes S2.1 – Include definitive statement that reiterates the requirements of Condition 7, Schedule 2 for concentrate transport. S2.3 – Include a commitment regarding the timing of detailed design for the new 	Section 2.1 updated and new Plan 2 prepared Condition 7 included Section 2.3 updated to

Date	Form/Agency	Comments and Outcomes	Response/how addressed
		intersection, within the context of commencement of construction S3 – Consider changing the name of this section to Transport Code of Conduct – to match the approval. S3.10 – Is there any means of monitoring compliance for traffic - Regular Traffic Audits / Surveys - Audits, Inspections, PTOs, Etc	include Section 138 Approval Chapter 3 updated Section 3.10 updated to include compliance monitoring and auditing
18/5/17	Email from RMS and follow-up telephone conversation	Contact details confirmed and copy of documentation provided including invitation to on site Annual Review meeting	Noted
24/5/17	Email to RMS	Copy of Transport Management Plan provided to RMS for comment	Noted