Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the project approval referred to in Schedule 1, subject to the conditions in Schedule 2.

Mike Young
Manager Mining Projects

Sydney 21st NOVEMBER 2014

SCHEDULE 1

The Project Approval 10_0191 for the Hera Gold Project, granted by the Deputy Director-General, Development Assessment and Systems Performance, under delegation from the Minister for Planning and Infrastructure on 31 July 2012.

SCHEDULE 2

1. In the acronyms and abbreviations at the beginning of Schedule 2:

   (a) Delete the definitions for Council, Department and Director-General.

   (b) Insert the following acronyms and abbreviations in alphabetical order:

BSC	Bogan Shire Council
CSC	Cobar Shire Council
Department	Department of Planning & Environment
Modification 2	Modification Application 10_0191 MOD 2 and supporting document titled *Hera Mine Section 75W Modification, Concentrate Haulage Route to Hermidale Siding*, prepared by YTC Resources, and dated 23 May 2014, and letter from Aurelia Metals dated 28 August 2014
Secretary	Secretary of Department, or nominee

2. Delete all references to 'Director-General' and replace with 'Secretary'.

3. Delete all references to 'Council' and replace with 'CSC'.

4. In Condition 2 of Schedule 2:

   (a) delete "and" after "approval;" in condition 2(c); and

   (b) delete condition 2(d) and insert the following:

   (d) Modification 1; and
   (e) Modification 2.

5. Insert the following after Condition 14 of Schedule 2:

ROAD MAINTENANCE CONTRIBUTIONS

15. By 30 September 2015, and annually thereafter until the cessation of transport operations, the Proponent shall make annual contributions of $20,000 to BSC for the maintenance of the unsealed sections of Nymagee-Hermidale Road.

6. Insert the following after Condition 35 of Schedule 3:

35A. Prior to commencing the transport of concentrate to the Hermidale rail siding via Nymagee-Hermidale Road, or an alternative date nominated by BSC and CSC (with respect to the works within the

relevant local government area), the Proponent shall implement, or contribute to the cost of implementing the recommendations in the report titled *Visual Review of Traffic Control Devices – Hera Mine to Hermidale Siding* prepared by Geolyse Pty Ltd and dated 7 May 2014, to the satisfaction of BSC and CSC.

35B. Prior to commencing the transport of concentrate to the Hermidale rail siding via Nymagee-Hermidale Road, or an alternative date nominated by CSC, the Proponent shall upgrade the intersection of Hartwood Street and Milford Street in accordance with the recommendations of the report titled *Geotechnical Investigation of Hartwood Street and Milford Street on Priory Tank Road, Nymagee NSW*, prepared by Envirowest Consulting Pty Ltd dated 23 May 2014 and the relevant AUSTROADS standards, to the satisfaction of CSC.

35C. Every two months during the transport of concentrate to the Hermidale rail siding via Nymagee-Hermidale Road, the Proponent shall
(a) inspect the condition of the unsealed section of the transport route in consultation with BSC; and
(b) grade the unsealed section of Nymagee-Hermidale Road where required and as identified in the inspection carried out in accordance with condition 35C(a),
to the satisfaction of BSC.

Note to conditions 35A-35C: In the event that there is a dispute between the Applicant and BSC or CSC about the implementation of these conditions, then either party may refer the matter to the Secretary for resolution.

7. Insert the following after condition 37 of Schedule 3:

Transport of Concentrate to Hermidale Rail Siding

37A The Proponent shall restrict the transport of concentrate to the Hermidale rail siding via the Nymagee-Hermidale Road during daylight hours and limit vehicle movements (entering and leaving the site) to 4 per day, averaged over a calendar month, unless otherwise agreed by the Secretary.

8. In Condition 38(a) of Schedule 3:
(a) insert 'Nymagee-Hermidale Road,' before 'Burthong Road';
(b) delete the words 'village of Nymagee' and replace with 'villages of Nymagee and Hermidale'; and
(c) delete 'Council' and replace with 'both BSC and CSC'.

9. Delete Appendix 5 and insert the following:

APPENDIX 5
STATEMENT OF COMMITMENTS

<table>
<tr><th>Desired Outcome</th><th>Action</th><th>Timing</th></tr>
<tr><td colspan="3">1 ENVIRONMENTAL MANAGEMENT</td></tr>
<tr><td>Compliance with all conditional requirements in all approvals, licences and leases.</td><td>1.1 Comply with all commitments recorded in Table 5.1.
1.2 Comply with all conditional requirements included in the:
Project Approval;
Environment Protection Licence;
Mining Lease(s); and
Any other approvals.</td><td>Continuous and as required.</td></tr>
<tr><td>All operations conducted in accordance with all relevant documentation.</td><td>1.3 Undertake all activities in accordance with the accepted Mining Operations Plan, environmental procedures, safety management plan and/or site-specific documentation.</td><td>Continuous and as required.</td></tr>
<tr><td colspan="3">2 AREA OF ACTIVITIES</td></tr>
<tr><td>All approved activities are undertaken generally in the location(s) nominated on the figures shown in Sections 2 and 4.</td><td>2.1 Clearly mark on the ground, and where appropriate, survey the boundaries of the areas of proposed disturbance.</td><td>Prior to the commencement of the relevant activity.</td></tr>
<tr><td colspan="3">3 OPERATING HOURS</td></tr>
<tr><td>All operations are undertaken within the approved operating hours.</td><td>3.1 Undertake all activities, where practicable, in accordance with the following operating hours.
<table>
<tr><th>Activity</th><th>Proposed Hours of Operation</th></tr>
<tr><td>Vegetation clearing and topsoil stripping</td><td rowspan="2">7:00 am to 6.00 pm</td></tr>
<tr><td>Construction operations – Box cut</td></tr>
<tr><td>Construction operations – Remainder</td><td rowspan="4">24 hours per day</td></tr>
<tr><td>Underground mining operations</td></tr>
<tr><td>Maintenance operations</td></tr>
<tr><td>Processing operations</td></tr>
<tr><td>Transportation operations</td><td>7:00 am to 10.00 pm</td></tr>
<tr><td>Rehabilitation operations</td><td>7:00 am to 6.00 pm</td></tr>
</table></td><td>Continuous and as required.</td></tr>
</table>

Desired Outcome	Action	Timing
4 ECOLOGY		
Minimise potential impacts on native flora and fauna.	4.1 Develop a *Biodiversity Management Plan* comprising: pest animal controls for the control of feral goat, cat, dog, fox; weed control program for the removal of noxious weeds and reducing further weed invasion; Grazing Plan using grazing as a management tool but in a controlled manner.	Prior to construction of the Tailings Storage Facility.
	4.1A Develop, in conjunction with EPA, a BioBanking Plan of Management in accordance with the relevant Environmental Protection Agency guidelines comprising a description of: the existing environment within the Biodiversity Offset Area; the assessment undertaken to determine the adequacy of the Biodiversity Offset Strategy; the management measures that would be implemented to ensure that the objectives of the strategy are achieved; and the method that would be employed to secure the Biodiversity Offset Strategy, including the method to ensure funds are available to implement the strategy.	Within 12 months of the receipt of project approval.
Manage potential impacts on threatened flora and fauna.	4.2 Manage impacts to threatened fauna and communities to ensure that the threatened species and potential habitats recorded within the Project Site are not impacted upon by: engaging appropriately qualified and experienced ecologists to undertake pre-clearance surveys within areas to be disturbed; implementation of a Driver's Code of Conduct for all personnel accessing the Project Site for the observation of site speed limit, safe driving protocols, incident management and reporting, noise minimisation;	Continuous throughout the life of the Project.

Desired Outcome	Action		Timing
4 ECOLOGY (Cont'd)			
Manage potential impacts on threatened flora and fauna. (Cont'd)		minimisation of impacts to nests and habitats of the recorded threatened species through implementation of administrative controls such as induction toolbox talks and making available fact sheets on the recorded threatened bird species (including descriptions and photographs of the species and their habitats to personnel responsible for vegetation clearing and excavation activities;	Continuous throughout the life of the Project.
		scheduling the clearing of substantive trees between April to September, where possible, to reduce risk of impact to tree-dependant microbats; Where not practicable, ensure that all hollows suitable for such microbats are inspected prior to clearing operations and roosting bats relocated by a suitably qualified wildlife handler. implementation of administrative controls comprising induction and toolbox talks to train personnel in the proper management procedures for the handling of any species of bats during tree clearing to prevent infection with zoonoses; use of suitably qualified personnel to handle the removal of bats of any species.	
	4.3	Mark areas to be cleared of vegetation following pre-clearance survey clearly and inducting workers on the nature and extent of clearing required to minimise no impact to surrounding vegetation.	
	4.4	Park machinery required for the Project within designated areas and/or disturbed areas only away from vegetated areas to be retained.	
	4.5	Examine all trees for the presence of birds or nestlings and arboreal mammals before felling or pushing and commencing with tree removal immediately after visual inspection.	
Manage potential impacts on all flora and fauna.	4.6	Clear hollow-bearing trees or dead stag (if required) within the Surface Facilities Area and Tailings Storage Facility only after a series of alternating 'gradual nudge' (e.g. with a dozer) and 'wait' to allow the occupants of hollows to escape.	During site establishment activities.
	4.7	Undertake no clearing of hollow-bearing trees within the area proposed for the new Back Tank East but allowing them to remain and be flooded *in situ.*	

Desired Outcome	Action		Timing
4 ECOLOGY (Cont'd)			
Manage potential impacts on all flora and fauna. (Cont'd)	4.8	Salvage tree trunks, major and minor branches from areas requiring clearing for subsequent relocation to areas to be revegetated.	Continuous throughout the life of the project.
	4.9	Include in inductions the ecological values of the felled trees and to warn against their collection for firewood.	
	4.10	Remove and properly dispose of any noxious or other weeds encountered during site clearing to prevent their spread to other locations within the Project Site, especially to drainage lines and storage dam areas.	
	4.10A	Fence relevant sections of the surface facilities area to prevent access by wildlife.	
Minimise impacts to local waterways and downstream creeks.	4.11	Minimise impacts to the local waterways and downstream creeks during expansion of Pete's Tank and construction of the proposed Back Tank East by: planning of the site establishment activities so that the in-stream work is kept to a minimum and would occur as a single event, where possible; restricting in-stream work to low-flow periods, where possible; limit machinery access to one designated location on the bank, create the shortest access track (and as narrow as possible within the constraints of safety and construction requirements) between this location and the point of activity;	During site establishment activities.
Manage potential risk to the health of the biota from the Tailings Storage Facility.	4.12	Manage potential risk to the health of the biota (birds, other wildlife and livestock) from the Tailings Storage Facility through engineering controls (including creating alternative habitats in nearby locations) including: creation of suitable and alternative habitats in the vicinity of the storage dams (expanded Pete's Tank and the proposed Back Tank East by revegetation of the disturbed areas with appropriate endemic native species.	Prior to the commencement of site establishment activities and continuous throughout the life of the project.

Desired Outcome	Action	Timing
4 ECOLOGY (Cont'd)		
Manage potential risk to the health of the biota from the Tailings Storage Facility. (Cont'd)	4.13 Manage potential risk to the health of the biota (birds, other wildlife and livestock) from the Tailings Storage Facility through administrative controls (policies, procedures, work routines) including; management of cyanide process solutions and waste streams to protect biota health and the environment by ensuring the concentration of the tailings pumped to the Tailings Storage Facility is less than10mg/L WAD cyanide; preparation of detailed emergency response plans for potential cyanide effects;	Ongoing throughout the life of the Project.
	development of procedures for internal and external emergency notification and reporting; training workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner; training workers to understand the hazards associated with cyanide use and discharge; training appropriate personnel to operate the Project in accordance with procedures that protect the environment; dissemination of operational and environmental information regarding cyanide use on site to all stakeholders through community consultation process; initiation of dialogue describing cyanide management procedures being adopted at the site and responsively address identified concerns.	
Ensure that Project-related impacts, if any, are identified as early as possible.	4.14 Implement ongoing monitoring programs to evaluate the effects of cyanide use on wildlife through routine observations on the wildlife, including wildlife utilization and mortality within the Project Site: recording of observations (via written notes and photography), within three hours of sunrise, of all wildlife visitations and mortality associated with the Tailings Storage Facility; and recording the supernatant level, the cyanide concentration and the history (cyanide concentration, proportion of solids in the slurry etc.) of the most recent tailings pumped into the Tailings Storage Facility.	

Desired Outcome	Action		Timing
4 ECOLOGY (Cont'd)			
Ensure that Project-related impacts, if any, are identified as early as possible. (Cont'd)	4.15	Implement ongoing monitoring programs to evaluate the effects of cyanide use on wildlife through cyanide concentration data collection in accordance with industry best practice: regular sampling and analyses of the supernatant solution from the Tailings Storage Facility and water samples (groundwater and surface waters) from upstream and downstream locations as part of the site's surface and groundwater monitoring program;	Ongoing throughout the life of the project.
		sampling as noted above immediately after recording of wildlife death in the vicinity of the Tailings Storage Facility.	
	4.16	Undertake monitoring of bat on an annual basis to establish any trend in population changes since commencement of the Project.	
	4.17	Undertake monitoring of the ongoing rehabilitation activities within the Project Site to ensure native vegetation regeneration is successful and to control weed invasion.	During Rehabilitation operations.
	4.18	Conduct annual monitoring of the Grey-crowned Babbler, Hooded Robin, Diamond Firetail and microbat populations including their breeding locations to gauge breeding success and to ensure recovery of local populations are successful following the land disturbing activities.	Ongoing throughout the life of Project.
	4.19	Undertake annual surveys of the Kultarr to establish a population census and compile information for use in the management of this species within the Project site and to allow year to year comparisons of any changes in habitat usage and population trends.	
	4.20	Monitor the rehabilitation activities within the Project Site to ensure native vegetation regeneration is successful and to control weed invasion.	During and following rehabilitation operations.
Manage weeds and pests within the Project Site.	4.21	Implement the industry best practice land management measures e.g. implementation of a weed and feral animal control program as part of a post-project *Land Management Plan.*	During and following rehabilitation operations.

Desired Outcome	Action		Timing
4 ECOLOGY (Cont'd)			
Ensure that Project-related impacts, if any, are identified as early as possible.	4.22	Continue with the annual monitoring of the Grey-crowned Babbler, Hooded Robin, Diamond Firetail and microbat populations including their breeding locations to gauge breeding success and to ensure recovery of local populations are successful.	
	4.23	Continue with the annual formal surveys of the Kultarr to establish a population census and compile information for use in the management of this species following rehabilitation activities and to allow year to year comparisons of any changes in habitat usage and population trends.	
Offset residual impacts on native flora and fauna.	4.24	Negotiate and implement an appropriate BioBanking Agreement as described in Section 2 of the *Response to Submissions* document	Within 12 months of the receipt of project approval.
	4.25	Implement fully the Biodiversity Offset Strategy, including ensuring that the strategy would be implemented in perpetuity and that fences required for the strategy would, where practicable, be constructed on the alignment of existing fences or adjacent to existing tracks or cleared areas.	Ongoing throughout the following the life of the Project.
5 GROUNDWATER			
Prevent hydrocarbon contamination of groundwater.	5.1	Store all hydrocarbon and chemical products within a bunded area complying with the relevant Australian Standard.	Ongoing throughout the life of Project.
	5.2	Refuel mobile equipment within designated, sealed areas of the Project Site. If refuelling is conducted in the field then procedures would be developed to minimise potential hydrocarbon spills.	

Desired Outcome	Action	Timing
5 GROUNDWATER (Cont'd)		
Prevent hydrocarbon contamination of groundwater. (Cont'd)	5.3 Undertake all maintenance works involving hydrocarbons, where practicable, within designated areas of the Project Site such as the maintenance workshop.	Ongoing throughout the life of Project.
	5.4 Direct all water from wash-down areas and workshops to oil/water separators and containment systems.	
	5.5 Ensure all hydrocarbon and chemical storage tanks are either self-bunded or bunded with an impermeable surface and a capacity to contain a minimum 110% of the largest storage tank capacity or greater where potential exists for multiple containers to fail at the same time.	
Prevention of groundwater contamination.	5.6 Design and construct the Tailings Storage Facility as described in Section 2.6 and in accordance with the requirements of the relevant government agencies. Key design parameters would be as follows. Construct the floor and walls of the Tailings Storage Facility in a manner that would achieve an appropriate permeability to prevent leachate leakage. Ensure that the Tailings Storage Facility embankment is keyed into the underlying material in a manner that would prevent down-slope migration of potentially contaminated groundwater from the facility. Construct seepage collection structures (Collection Drain and Seepage Collection Pond) at the foot of the Tailings Storage Facility embankment and ensure that any captured seepage is automatically pumped back to the Tailings Storage Facility or Process Water Dam. Install piezometers at appropriate intervals at the base of the Tailings Storage Facility embankment and monitor these regularly to assess the integrity of the facility.	During site establishment activities.
	5.7 Prepare a *Groundwater Monitoring Plan* as part of the *Water Management Plan* in consultation with NSW Office of Water, including procedures for: recording of standing water levels and groundwater quality within bores used to supply operational water for the Project, as well as within monitoring bores associated with the tailings storage facility and processing plant;	Prior to the commencement of mining operations.

Desired Outcome	Action		Timing
5 GROUNDWATER (Cont'd)			
Prevention of groundwater contamination. (Cont'd)		monitoring the standing water levels in neighbouring bores to observe any drawdown effects; and further investigation of groundwater impacts in the event that identified trigger levels are exceeded.	Prior to the commencement of mining operations.
Ensure that groundwater is not discharged to natural drainage.	5.8	Ensure that all groundwater removed from the proposed underground mine or the production bores is pumped only to the Header Tank, the Raw Water Pond or other water storage constructed in a manner that would ensure that the water would not discharge to natural drainage.	Throughout the life of the Project.
Prevention of groundwater contamination.	5.9	Ensure that material placed within the acid-forming waste rock encapsulation area is preferentially transported back underground as a priority.	As soon as practicable after the initial stope is completed.
	5.10	Implement the following procedures in the event that acid generation within the acid-forming waste rock encapsulation area is identified. - Monitoring of leachate within the Leachate Management Pond would be increased in frequency. - All leachate would be removed to the process water pond as it is generated, limiting the potential for this material to discharge or seep from the pond. - A management plan would be developed to facilitate prompt transportation of acid-forming material back underground or, if this is not practicable, temporary encapsulation of this material.	Following identification of acid generation within the acid-forming waste rock encapsulation area.
6 SURFACE WATER			
Maintenance of surface water quality.	6.1	Prepare a Surface Water Monitoring and Response Plan as part of the Project Site's *Water, Sediment and Erosion Control Plan* and in consultation with OEH including a description of surface water management structures and procedures to ensure that the criteria identified in Section 4.4.3 any additional criteria included in the Environment Protection Licence or project approval are achieved.	Prior to and during site establishment activities.

Desired Outcome	Action		Timing
6 SURFACE WATER (Cont'd)			
Capture of sediment-laden water flows from project related disturbance.	6.2	Construct sediment and erosion control structures for the separation of clean, dirty and contaminated water on site (as shown in Figure 2.4 and discussed briefly in Section 2.2.4) comprising the following. Clean water diversions in the vicinity of the Surface Facilities Area and Tailings Storage Facility to divert clean water away from the disturbed areas: Dirty water diversions to channel water to sediment basins to allow sediment to settle out from dirty water prior to discharge to natural drainage. All outlets would be designed for the 100-year ARI storm event. Contaminated water collection structures, including downstream of the Tailings Storage Facility and within the processing plant to collect and channel potentially contaminated water to suitable structures for pumping to the Process Water Dam or the Tailings Storage Facility.	Prior to and during site establishment activities.
	6.3	Construct the unpaved access roads (Main Site Access Road and Light Vehicle Road) with a crowned surface to shed water onto surrounding land.	
	6.4	Install mitre drains, where necessary, to reduce concentrated flow.	
	6.5	Ensure access roads would be gravel-sheeted using crushed waste rock.	
	6.6	Design and construct a sealed causeway where the Main Site Access Road crosses Watercourse A approximately 250m from the Main Site Entrance in consultation with NSW Department of Primary Industries – Fisheries and NSW Office of Water.	
	6.7	Ensure that all water management structures where practicable are constructed to the specifications identified in Landcom (2004) and DECC (2008).	

Desired Outcome	Action		Timing
6 SURFACE WATER (Cont'd)			
Capture of sediment-laden water flows from project related disturbance. (Cont'd)	6.8	Inspect all surface water control structures at least quarterly and following any rainfall event of more than 25mm in 24-hours to ensure their adequacy and identify where remedial action is required.	Prior to and during establishment activities.
Manage potential pollutant discharges.	6.9	Ensure processing/tailings water would be contained within a closed loop and re-used within the Processing Plant, and pump tailings to the Tailings Storage Facility following destruction of weak acid dissociable cyanide concentration to <10 ppm.	Ongoing throughout the life of Project.
	6.10	Design and construct the Tailings Storage Facility to prevent leakage of leachate into the groundwater.	During mine design and prior to construction stages.
	6.11	Construct a clean water diversion upstream of the Tailings Storage Facility to completely divert any upslope run-on. This bund would be stabilised to effectively convey the 100-year ARI, time-of-concentration flow from the upstream catchment.	Prior to and during site establishment activities.
	6.12	Construct a seepage collection drain and pond downslope of the Tailings Storage Facility to collect potentially contaminated leachate from the Tailings Storage Facility, if any, and pump it back to the Tailings Storage Facility.	
	6.13	Ensure that all fuel and chemical storage, delivery and handling areas are bunded to 110% of the size of the largest receptacle.	Ongoing throughout the life of Project.
	6.14	Ensure that pumps and fluid lines for the delivery of chemicals or fuels would be bunded and/or protected. Transfer volumes would be monitored at all times to quickly identify any leaks and appropriate action to be undertaken.	
	6.15	Ensure that stormwater trapped in the Settling Ponds and Sediment Basins is pumped back to the Raw Water Dam for reuse in ore processing, or treat with flocculants, if required, to achieve total suspended solids concentration of 50mg/L prior to release.	

Desired Outcome	Action		Timing
6 SURFACE WATER (Cont'd)			
Manage potential pollutant discharges. (Cont'd)	6.16	Install appropriate water management structures within the Processing Plant area to trap incident rainfall and isolate any potentially contaminated from the area, and for the subsequent transfer to the Process Water Dam for reuse.	Ongoing throughout the life of Project.
	6.17	Treat wastewater using aerated wastewater treatment systems and dispose of the secondary-treated effluent in dedicated, vegetated, irrigation areas.	
	6.18A	Undertake ecotoxicologal testwork for proposed flocculants on a water flea (e.g. cladoceran), a relevant fish species and a freshwater alga to provide confidence that the flocculent is suitable for use within the Project Site, namely that the acute toxicities (50 precent lethal concentrations (LC50)) are appropriate.	Prior to the commencement of processing operations.
Manage surface water flow in rehabilitated areas.	6.18	Develop a *Soil and Water Management Plan* to accompany the capping works, including the exact nature of the capping procedure, at the former Tailings Storage Facility.	During rehabilitation operations.
	6.19	Shape the decommissioned Tailings Storage Facility into a raised plateau with a shallow dome profile so that water would be shed from its surface as sheet flow without concentration.	
	6.20	Ensure that rehabilitation, including the placement of soil and revegetation with endemic native species is undertaken promptly once sections of the Project Site are no longer required for mining-related purposes.	
	6.21	Construct surface water control structures on the rehabilitated landform as required to limit the potential for erosion of newly placed soils by implementing the following. - Retain clean water diversion structures upstream of the Tailings Storage Facility. These structures would be designed to withstand a 100 year ARI rainfall event. - Install an appropriate number of engineered, drop structures on the rehabilitated face of the former Tailings Storage Facility to safely transfer surface water down to original ground level, and to prevent erosion of the embankment at the location of these structures.	
	6.22	Ensure that sediment control structures constructed for the Project remain in place until rehabilitated areas are sufficiently stabilised.	

Desired Outcome	Action		Timing
6 SURFACE WATER (Cont'd)			
Manage surface water flow in rehabilitated areas. (Cont'd)	6.23	Develop a *Water Management Plan* for the Project Site in consultation with NSW Office of Water , comprising (in part): *A Surface Water Monitoring and Response Plan;* *An Erosion and Sediment Control Plan;* *A Site Water Balance*.	Following project approval.
7 NOISE AND BLASTING			
Noise generated by operational activities does not exceed DECCW nominated criteria nor significantly impacts on neighbouring landowners and/or residents.	7.1	Install frequency modulated reversing alarms on all mobile equipment.	Ongoing.
All activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	7.2	Regularly service all equipment in accordance with manufacturer's instructions.	
	7.3	Ensure that all truck drivers would be required to comply with the Hera Resources Pty Limited's Driver Code of Conduct outlining procedures for reducing noise impacts during transportation within the Project Site and off site.	Prior to and continuous during mining operations.
	7.4	Undertake noise monitoring at the residences most likely to be affected by noise generated by the Project.	Continuous during mining operations.
	7.5	Maintain an open dialogue with the surrounding community and neighbours to ensure any concerns over noise or vibration are addressed.	Prior to commencement of mining operations.
	7.6	Ensure that all blasts are designed by a suitably qualified and experienced blasting engineer or shot-firer such that each is designed in accordance with the ANZECC Blasting Guidelines to achieve the relevant criteria at the closest residence.	Continuous during mining operations.
	7.7	Prepare a *Noise Management and Monitoring Program* prior to the commencement of mining activities which would incorporate the specific details of all noise controls and provide measures to address noise criteria exceedances and/or complaints should they occur.	Following project approval and prior to operations.

Desired Outcome	Action		Timing
8 ABORIGINAL HERITAGE			
Site activities are undertaken without impacting upon any Aboriginal heritage items.	8.1	Undertake further site inspections of those sections of the Mine Camp and Tailings Storage Facility that were not surveyed during the 2010 OzArk assessment prior to disturbing the ground to confirm the assessment that there are no objects or sites of Aboriginal heritage significance within the proposed areas of disturbance.	Prior to the commencement of site establishment operations.
	8.2	Cease all work in the vicinity of an Aboriginal sites or objects found during ground-clearing construction works, and seek advice from OEH, the National Parks and Wildlife Service and Condobolin and Cobar Local Aboriginal Land Councils will be sought on how to best proceed. Work would not recommence in the area of the find, until the officials contacted have inspected the material and permission has been given to continue with the construction works.	As required.
	8.3	Implement the following procedures, if during the life of the Project suspected human remains are identified within the Project Site. **Step 1** the suspected skeletal remains would not be touched or disturbed. **Step 2** A buffer zone of 50m x 50m would to be established around the suspected remains and all work in the vicinity of the suspected remains to be suspended until the area has been assessed. **Step 3** The NSW Police and the DECCW to be contacted to make an assessment of the discovery. If appropriate, mitigation procedures to be developed in consultation with the registered stakeholders.	
9 HISTORICAL HERITAGE			
Site activities are undertaken without impacting upon any significant non-Aboriginal heritage items.	9.1	Ensure trees identified to possess toe-holds and bark-rings located east of the project Site (listed in Table 4of OzArk 2011b) are not removed.	Ongoing throughout the life of Project.

Desired Outcome	Action		Timing
10 AIR QUALITY AND ENERGY			
Minimise impacts to air quality relating to the Project.	10.1	Limit disturbance to the minimum area necessary for mining and associated activities.	Ongoing throughout the life of Project.
	10.2	Spray unsealed access roads and other trafficked areas with water carts at a rate of 2L/m^2/hour, as required, when visible dust is generated.	
	10.3	Incorporate water spray facilities at all transfer points in the crushing and screening circuit within the Processing Plant.	
	10.4	Maintain ore handling areas / stockpiles in a moist condition by using water carts to water down areas affected by wind-blown and traffic-generated dust.	
	10.5	Install suitable dust control measures within the crushing and dry screening components of the Processing Plant, including water sprays, to ensure that the required level of dust suppression is achieved. Alternatively, enclose these components, with venting to a fabric filter or equivalent device for removal of particulate matter from the airstream prior to release.	
	10.6	Maintain approximately 75% of the Tailings Storage Facility area as wet, with emissions restricted to 25% of the surface area of the Tailings Storage Facility.	
	10.7	Cap or otherwise treat the Tailings Storage Facility during rehabilitation activities following completion of operations.	
	10.8	Maintain and inspect dust control systems, in accordance with supplier recommendations.	
	10.9	Ensure site personnel understand fundamentals of air emissions, and have been trained to make timely reporting of any visible air emissions to allow for prompt and appropriate action to be undertaken for the management of the identified emissions.	

Desired Outcome	Action	Timing
10 AIR QUALITY AND ENERGY (Cont'd)		
Minimise impacts to air quality relating to the Project. (Cont'd)	10.10 Install an onsite real-time meteorological monitoring program in accordance with the recommendations of the OEH's *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales* (DEC, 2007).	Ongoing throughout the life of Project.
	10.11 Use biodegradable dust suppressants with insignificant environmental impacts for controlling dust emissions from unsealed roads and disturbed areas.	
	10.12 Minimise drop-heights from the ROM bin to the primary crusher.	
	10.13 Establish vegetative cover, using endemic native grass species, over all long term topsoil stockpiles not regularly used.	
	10.14 Profile all surfaces to reduce velocity of overland winds.	
	10.15 Contour the final landform shape to avoid strong wind flows and smooth gradients to reduce turbulence at surface.	
	10.16 Apply vegetative cover using endemic native grass species, to non-operational exposed surfaces, e.g. Tailings Storage Facility wall, ROM pad batters, as soon as practical after disturbance.	
	10.17 Reshape, topsoil and rehabilitate completed Waste Rock Emplacement areas as soon as practicable after they are no longer required for mining-related purposes.	
	10.18 Progressively optimise the underground mine design to minimise travel distances for mining equipment and re-handling of waste and ore material.	
	10.19 Use mining equipment which is regularly maintained and serviced to maximise efficiency.	
	10.20 Optimise the design of the Processing Plant to: minimise the amount of conveyor operating hours with zero load; maximise the use of gravity to move material through the Processing Plant reducing the need for pumping; and maximise the use of energy efficient motors in major pieces of the Processing Plant.	
	10.21 Adopt the use of energy efficient lighting technologies and hot water and air conditioning systems wherever practical.	

Desired Outcome	Action	Timing
10 AIR QUALITY AND ENERGY (Cont'd)		
Minimise impacts to air quality relating to the Project. (Cont'd)	10.22 Maximise the recovery of recyclable materials where practicable, including: waste hydrocarbons; polyethylene; and scrap metals.	Ongoing throughout the life of Project.
	10.23 Minimise waste sent to landfill through the development of appropriate purchasing and waste management plans.	
	10.24 Progressively review and implement energy efficiency measures throughout the life of the Project.	
	10.25 Prepare an Air Quality Monitoring Program in consultation with OEH and the surrounding community, including: installation of a high volume air sampler at the Mine Camp, initially for a period of 12 months, with continued monitoring after that period to be determined in consultation with Office of Environment and Heritage; and procedures for monitoring particulates within exhaust air in the proposed ventilation rise.	Prior to the commencement of site establishment operations.
	10.26 Install an onsite real-time meteorological monitoring program in accordance with the recommendations of OEH's Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007).	
11 TRAFFIC		
Achieve safe and efficient transport operations.	11.1 Construct the Main Site Entrance intersection on Burthong Road and upgrade of the existing site access intersection to a Basic left turn (BAL) rural intersection treatment in accordance with RTA's Austroads guidelines to cater for 36m road trains and light vehicle/light rigid trucks respectively.	During site establishment operations.
	11.2 Regularly inspect and clear long grass and bushes that grow on the road shoulder to maintain the maximum possible sight distance	Ongoing throughout the life of Project.
	11.3 Treat internal roads with chemical suppressants, where appropriate, to minimise dust generation.	

Desired Outcome	Action	Timing
11 TRAFFIC (Cont'd)		
Achieve safe and efficient transport operations. (Cont'd)	11.4 Restrict vehicle speed within the Hera Mine to 40km/hr.	Ongoing throughout the life of Project.
	11.5 Ensure that all vehicles transporting bulk concentrate are loaded using a front-end loader fitted with a bucket load indicator to avoid overloading.	
	11.6 Ensure product is transported from the Project Site during daylight hours	
	11.7 Prepare, implement and enforce a Driver's Code of Conduct for all heavy vehicle drivers accessing the Project Site regularly.	
	11.8 Investigate any complaints in relation to transportation of concentrate promptly.	
	11.9 Prepare and implement a Traffic Management Plan to document relevant procedures to be implemented during the intersection construction works and throughout the life of the Project.	
Ensure adequate maintenance of local roads. – Cobar Shire Council.	11.10 Negotiate an appropriate arrangement with Cobar Shire Council for the transportation of concentrate on Berthong and Priory Tank Roads at an indicative rate of $1.82/t	Prior to the commencement of concentrate transportation.
	11.11 - Upgrade of the intersection Hartwood Street and Milford Street on Priory Tank Road, Nymagee - Undertake road surface upgrades if deterioration of roads is occurring as a result of mining activities, using the Visual Road Pavement Condition Assessment, Hera Mine to Hermidale Siding, by Geolyse 2014 as an initial road condition report. - Install traffic control devices in accordance with the Review of Traffic Control Devices, Hera Mine to Hermidale Siding, by Geolyse, May 2014	Prior to the commencement of concentrate transportation unless agreed otherwise with the Cobar Shire Council, and during operations
Ensure adequate maintenance of local roads. – Bogan Shire Council	11.12 - Undertake road surface upgrades if deterioration of roads is occurring as a result of mining activities, using the Visual Road Pavement Condition Assessment, Hera Mine to Hermidale Siding, by Geolyse 2014 as an initial road condition report. - Install traffic control devices in accordance with the Review of Traffic Control Devices, Hera Mine to Hermidale Siding, by Geolyse, May 2014 - Undertake a review of the unsealed section of the Nymagee –Hermidale road every two months,with the Shire, and undertake grading of the road if deemed necessary - Contribute $20,000 annualy to the re-sheeting program of the unsealed section of the Nymagee-Hermidale Road	Prior to the commencement of concentrate transportation, unless agreed otherwise with the Bogan Shire Council, and during operations

Desired Outcome	Action	Timing
11 TRAFFIC (Cont'd)		
	-Hera Resources will restrict concentrate haulage during times of rainfall to prevent deterioration of the unsealed section of road	
Ensure roads and tracks do not adversely impact on fish passage within the Project Site.	11.13 Ensure that all roads and tracks across waterways are designed and constructed. - in consultation with Department of Primary Industries – Fisheries and in accordance with the documents *"Policy and Guidelines for Fish Friendly Waterway Crossings (2004)"* and *"Why do Fish Need to Cross the Road? - fish passage requirements for waterway crossings"; and* - in consultation with NSW Office of Water and in accordance with the Office of Water's Guidelines for Controlled Activities.	Prior to and during site establishment operations.
12 SOILS AND LAND CAPABILITY		
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion.	12.1 Minimise handling of all soils to minimise their structural damage by ensuring the areas for stripping and stockpiling are clearly identified.	During site establishment operations.
	12.2 Strip topsoils within the Surface Facilities Area to a depth of 200mm and store in stockpiles no more than 2m high.	
	12.3 Strip topsoils within the Tailings Storage Facility and other areas of the Project Site to a depth of 300mm and store in stockpiles no more than 2m high.	

Desired Outcome	Action		Timing
12 SOILS AND LAND CAPABILITY (Cont'd)			
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. (Cont'd)	12.4	Strip subsoil in relevant areas to bedrock and store in stockpiles no more than 3m in high.	During site establishment operations.
	12.5	Refrain from stripping or placing soils during wet conditions.	
	12.6	Ensure that machinery used for stripping operations would dump their loads neatly and uniformly so that the stockpile does not require further forming prior to establishment of vegetation cover.	Ongoing throughout the life of Project.
	12.7	Avoid driving of machinery on the topsoil and subsoil stockpiles once the stockpiles are created to minimise compaction and further degradation of soil structure.	
	12.8	Construct upslope water diversion banks to direct overland surface water flow away from the soil stockpiles.	
	12.9	Implement downslope sedimentation controls as required, until the surface of the soil stockpiles are appropriately stabilised using groundcover species.	Ongoing throughout the life of Project.
	12.10	Ensure the formed soil stockpile surfaces would have a generally uneven surface that is as 'rough' as possible, in a micro-sense, to assist in surface water runoff control and seed retention and germination.	
	12.11	Sow soil stockpiles with stabilising groundcover, comprising endemic native species as soon as possible after placement and water, if necessary, to speed up establishment and attain a cover of at least 30% to minimise erosion and sedimentation.	
	12.12	Ensure slopes less than 2% are rehabilitated with Red Earths with due regard to the following precautionary measures: no furrowing would be used; maintain the length of exposed slopes to less than 80m; use windrows of mulch placed along the contours and ensuring these would not act as drains themselves.	
	12.13	Ensure slopes between 2% and 10% have a concave profile and are covered with Lithosols.	
	12.14	Ensure slopes of more than 10% are protected with rock-pitching.	

Desired Outcome	Action		Timing
12 SOILS AND LAND CAPABILITY (Cont'd)			
Maintenance of soil value for rehabilitation and minimisation of soil loss through erosion. (Cont'd)	12.15	Ensure that during soil placement operations soil is placed directly onto a scarified surface without compaction and in correct order, namely topsoil overlying subsoil.	Ongoing throughout the life of Project.
	12.16	Add, where appropriate, organic matter comprising composted cleared vegetation.	
	12.17	Use organic material in preference to fertilizers during rehabilitation.	
	12.18	Ensure soil management procedures are developed in accordance with Landcom (2004) and DECCW (2008).	
13 VISUAL AMENITY			
Limit the visibility of operational areas from nearby residences.	13.1	Construct the Processing Plant and other on-site infrastructure from non-reflective, neutral coloured material, where possible.	Ongoing throughout the life of Project.
	13.2	Progressively rehabilitate disturbed sections of the Project Site no longer required for the Project, and re-vegetate areas that are bare or only have remnant vegetation.	
	13.3	Undertake active dust management measures to reduce the potential for the creation of a 'dust cloud', especially during site establishment activities.	
	13.4	Manage waste within the Project Site in an appropriate manner such that the site will not become littered with wind-blown rubbish.	
	13.5	Maintain the Project Site in a clean and tidy condition at all times.	
	13.6	Ensure night-time lighting is directed towards the active areas of operation only and towards the ground to minimise the light spill from the Project Site.	
	13.7	Ensure lighting is turned off when not required.	
14 BUSHFIRE			
Avoidance of any fires on site, particularly in native vegetation.	14.1	Ensure that refuelling is undertaken within designated fuel bays or within cleared areas of the Project Site.	Ongoing throughout the life of Project.
	14.2	Implement a no smoking policy in all but designated sections of the Project Site.	
	14.3	Ensure fire extinguishers are maintained within all vehicles.	

Desired Outcome	Action		Timing
14 BUSHFIRE (Cont'd)			
Avoidance of any fires on site, particularly in native vegetation. (Cont'd)	14.4	Ensure clearing during high or extreme bushfire hazard conditions (as defined by the NSW Rural Fire Service) would be avoided.	Ongoing throughout the life of Project.
	14.5	Ensure there is a focus on house-keeping.	
	14.6	Ensure that vegetation clearing extends at least 15m from all built infrastructure.	
	14.7	Ensure that a water cart available to assist in extinguishing any fire ignited.	
	14.8	Liaise with the Rural Fire Service, Cobar Shire Council and Office of Environment and Heritage (NPWS) to determine when back-burning or fire control activities are planned.	
	14.9	Ensure access to on-site water storages for the NSW Rural Fire Services is available in the event of a fire within or surrounding the Project.	
15 HAZARDOUS CHEMICAL & WASTE MANAGEMENT			
Implement adequate controls for the management of hazardous chemicals.	15.1	Manage the Project Site in accordance with NICNAS Category 1 of *Priority Existing Chemical Assessment Report No 31 – Sodium Cyanide* (Commonwealth Department of Health and Ageing) to ensure that adequate controls exist to reduce weak acid dissociable cyanide concentration to <10 ppm prior to discharge to the Tailings Storage Facility.	Prior to, during and following the life of the Project.
	15.2	Store and manage all chemicals in accordance with the *Hydrocarbon and Chemical Management Plan* prepared for the site, and the *Material Safety Data Sheets* of the individual chemicals and reagents.	
	15.3	Ensure sodium cyanide and other toxic chemicals are stored in accordance with the requirements of *AS/NZS 4452- The Storage and Handling of Toxic Substances.*	
	15.4	Ensure that dangerous goods are transported in accordance with the requirements of the *"Australian Code for the Transport of Dangerous Goods by Road and Rail- Current Edition."*	
	15.5	Train employees using hazardous chemicals in their proper handling and spill management techniques.	
	15.6	Dispose of excess chemicals and reagents no longer required for the Project properly using qualified personnel for their removal and transfer to appropriate licensed facility for destruction or reuse.	

Desired Outcome	Action	Timing
15 HAZARDOUS CHEMICAL & WASTE MANAGEMENT (Cont'd)		
Manage waste using the hierarchy minimise waste production, reuse and recycle materials, and dispose of waste not able to be recycled.	15.7 Manage non-production waste in accordance with the objects of the *Waste Avoidance and Resource Recovery Act 2000*andoperate the Project against the hierarchy of avoidance of unnecessary resource consumption, resource recovery (including reuse, reprocessing, recycling and energy recovery where practical), and disposal of materials only after no uses have been identified for them.	Prior to, during and following the life of the Project.
	15.8 Encourage the most efficient use of resources, aim for a continual reduction in waste generation, and thus reduce environmental harm in accordance with the principles of ecologically sustainable development.	
Ensure that contaminated land is appropriately identified and managed	15.9 Ensure that a contaminated land assessment is undertaken prior to the commencement of decommissioning operations and that any contaminated land is managed in accordance with the relevant guidelines applicable at the time.	Prior to the commencement of decommissioning operations.
16 SOCIO ECONOMIC		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site.	**Social and Community** 16.1 Continue to engage in regular dialogue with neighbours surrounding the Project Site in relation to the Project activities and maintain an "open door" policy for interested parties to discuss aspects of proposed activities that may be perceived as problematic.	Prior to, during and following the life of the Project.
	16.2 Support community organisations, groups and events, as appropriate, and review any request by a community organisation for support or assistance to resolve any issues raised throughout the life of the Project.	Prior to, during and following the life of the Project.
	16.3 Form and maintain a Community Consultative Committee (CCC) and which would include representative members of the surrounding community and Cobar Shire Council.	
	16.4 Regularly brief the CCC and wider community on activities within the Project Site and seek feedback in relation to any perceived or otherwise of Project-related impacts. Seek advice on how to provide assistance to resolve issues raised by any member of the community in an effective, fair and equitable manner.	

Desired Outcome	Action	Timing
16 SOCIO ECONOMIC (Cont'd)		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site. (Cont'd)	16.5 Instigate and maintain a community complaints telephone line, and ensure this mechanism of complaints receival by the Proponent is advertised widely using flyers and verbal announcements at community consultation meetings.	Prior to, during and following the life of the Project.
	16.6 Negotiate with Council and the surrounding Nymagee community to support (either financially of in-kind) one or more community projects in accordance with the documents entitled Cobar Shire Council Social Plan 2011-2016 and the Cobar Shire Community Strategic Plan (in preparation).	
	Employment and Training 16.7 Give preference when engaging new employees, where practicable, to candidates from the surrounding community over candidates with equivalent experience and qualifications from elsewhere and ensure that the mining and other contractors do so as well.	
	16.8 Encourage the involvement of the local Aboriginal community in the workforce.	
	16.9 Encourage and support participation of locally-based employees and contractors in training or education programs to impart the appropriate skillsets and qualifications in them for the continued development of the economic growth within the surrounding communities following Project completion.	
	Economic Contribution and Development 16.10 Give preference, where practicable and cost-competitive, to suppliers of equipment, services or consumables located within the surrounding community.	
	16.11 Assist community members and others, as appropriate, to establish complementary businesses where those businesses would provide a benefit to the community through increased economic development.	
	16.12 Assist Cobar Shire Council to promote and encourage economic development that would continue beyond the Project life.	

Desired Outcome	Action	Timing
16 SOCIO ECONOMIC (Cont'd)		
Maximise the positive impacts and minimise any actual or perceived adverse impacts on the social fabric or facilities available to the community surrounding the Project Site (cont'd).	**Infrastructure and Services** 16.13 Ensure that infrastructure and services established as part of the Project would remain available for alternative uses throughout the life of the Project and upon cessation of mining activities.	Prior to, during and following the life of the Project.
	16.14 Encourage and support, in consultation with the local community, the provision of services to the community. These may include health, education, transportation and other services.	
	Rehabilitated Lands 16.15 Ensure that the land capability of those sections of the final landform to be used for grazing is similar to the current land capability.	During rehabilitation operations.
	16.16 Ensure the final landform is free flowing and geotechnically stable.	
17 ENVIRONMENTAL MONITORING & DOCUMENTATION		
Ongoing monitoring and reporting of Project-related environmental impacts.	17.1 Establish an environmental monitoring program for the Project Site and present results of the monitoring program in the *Annual Environmental Management Report*.	Prior to, during and following the life of the Project.
	17.2 Implement a *Biodiversity Monitoring Program* to identify potential Project-related impacts on surrounding flora and fauna during the life of the Project.	
	17.3 Implement a *Property Vegetation Plan* (in accordance with *Native Vegetation Act 2003* for the management of the proposed Biodiversity Offset Area and consistent with the Project's Biodiversity Offset Strategy.	
	17.4 Implement a *Noise Management and Monitoring Program* prior to the commencement of mining activities.	
	17.5 Implement the Project's *Air Quality Monitoring Program.*	
	17.6 Implement the Project's*Groundwater Monitoring and Response Program.*	
	17.7 Implement the Project's*Surface Water Monitoring and Response Program.*	
	17.8 Implement a *Traffic Management Plan.*	

Desired Outcome	Action	Timing
17 ENVIRONMENTAL MONITORING & DOCUMENTATION (Cont'd)		
Ensure appropriate documentation of the proposed mining-related activities.	17.9 The Proponent would prepare the following documentation. *Mining Operations Plan*. *Biodiversity Management Plan*. *Water, Sediment and Erosion Control and Management Plan.* *Noise Management and Monitoring Program.* *Groundwater Monitoring and Response Program*. *Surface Water Monitoring and Response Program*. *Air Quality Monitoring Program*. *Traffic Management Plan*. *Driver's Code of Conduct.* *Hydrocarbon, Chemical and Reagent Management Plan*.	As indicated previously.