# **Appendix 2**

# Updated Summary of Environmental Management and Monitoring Measures

(Total No. of pages including blank pages = 16)

#### **BOWDENS SILVER PTY LIMITED**

Bowdens Silver Project

SUBMISSIONS REPORT Report No. 429/33

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Table A2.1 Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	sure	Timing*		
1. Noise					
Minimise noise-related impacts from all mobile earthmoving equipment.	1.1	Use noise attenuated mobile equipment comprising low noise or extra quiet mobile equipment where practical.	Ongoing.		
	1.2	Restrict bulldozers to operate in 1st gear when operating out of the open cut pits.	Ongoing.		
	1.3	Install broadband noise "quacker" style reversing alarms on all mobile equipment.	Ongoing.		
	1.4	Progressively construct the lower embankment noise barrier around the WRE and southern barrier.	Ongoing.		
	1.5	Position acoustic barriers up to 8.5m high adjacent to the main open cut pit haul road and northern exit to the ROM pad.	Prior to evening mining operations.		
Minimise noise-related impacts from fixed plant.	1.6	Use full or partial enclosures to attenuate noise from fixed plant where practical.	Construction stage.		
	1.7	Use low noise specifications, low noise idlers, soft-flow chutes and silencers.	Ongoing.		
	1.8	Install mid-high frequency noise conveyor alarms.	Construction stage.		
	1.9	Position nearfield acoustic barriers around the TSF crushing/screening plant.	During TSF embankment construction stage.		
Continuous delivery of waste rock of an evening and ore at night.	1.10	Optimise the evening waste rock haul route to maximise the barrier effect from the existing topography and temporary acoustic bunds within the active WRE areas.	Prior to evening mining operations.		
	1.11	Optimise the night-time ore haul route to maximise the barrier effect from the existing topography and acoustic barriers adjacent to the main open cut pit haul road to the ROM pad.	Prior to night- time mining operations.		
Manage noise generated by the Project to levels that are compliant with	1.12	Schedule potentially intrusive activities in day-time and/or favourable weather conditions, where feasible.	Ongoing.		
conditional noise criteria.	1.13	Establish and operate a real-time noise monitoring network at key residential receivers or at intermediate locations to identify the need to modify operations or shut down plant and equipment during noise enhancing weather conditions.	Ongoing.		
	1.14	Establish and maintain a continuous meteorological monitoring network for the Project.	Ongoing.		
Proactive Liaison with potentially affected residents.	1.15	Discuss planned activities and effectiveness of noise controls with residents in close proximity to each construction site.	During site establishment and construction stage.		
	1.16	Discuss with all residents/occupiers of properties at which noise levels are predicted to exceed the Project Noise Trigger Level their actual experience of the noise that is audible.	Ongoing.		

Table A2.1 (Cont'd)
Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	sure	Page 2 of 13 Timing*			
	2. Blasting and Vibration					
Proactively record baseline conditions for ongoing assessment of structural change impacts (where they are suspected to occur).	2.1	Commission structural surveys of all privately- owned residences within 2km of all open cut pits (subject to the agreement of the landowner and/or occupier).	Prior to the first blast (where agreement of the landowner and/or occupier has been provided).			
Compliance with blasting criteria at all privately-owned residences / receivers.	2.2	Design all blasts within the Mine Area to meet airblast overpressure and ground vibration criteria at all privately-owned residences / receivers without VLAMP agreements.	All blasts.			
	2.3	Provide notification of blasts to occupants of residences within 2km of each blast (subject to individual arrangements with landowners and/or occupiers).	At least 24 hours prior to each blast.			
	2.4	Maintain a blast notification board at locations in Lue with notifications posted at least 24 hours prior to each blast.	At least 24 hours prior to each blast.			
		3. Air Quality				
Reduce dust generated by vehicles on site.	3.1	Apply site-wide vehicle speed limits and confine vehicle travel to designated routes.	Ongoing.			
	3.2	Actively maintain and water haul roads (with records kept of daily water use).	Ongoing.			
Reduce dust generated during extraction and processing.	3.3	Minimise travel speed and the distance travelled by bulldozers and coordinate activities to reduce push and haul distances and double handling.	Ongoing.			
	3.4	Use of water sprays and/or dust aprons/collectors for drill rigs.	During drilling.			
	3.5	Confirm proper stemming column length in each hole.	Prior to each blast.			
	3.6	Minimise drop heights when loading ore, waste rock and soil.	Ongoing.			
	3.7	Enclose the ROM feed hopper on three sides and operate water sprays during ore placement into the hopper.	Ongoing.			
	3.8	Apply water during crushing operations.	During crushing operations.			
	3.9	Progressively rehabilitate (both temporary and long-term) disturbed areas as applicable to the temporary / long-term use.	Ongoing as areas become available.			

### Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas		Timing*
		3. Air Quality (Cont'd)	
Undertake site activities without exceeding EPA air quality criteria or goals.	3.10	<ul><li>Implement a proactive dust management system through a combination of the following.</li><li>i) Meteorological forecasts - to predict when the risk of dust emissions may be high</li></ul>	Ongoing during operations and rehabilitation works involving
		(due to adverse weather)	earthmoving.
		<ul> <li>Visual monitoring - to provide an effective mechanism for proactive control of dust at source, before it leaves the Mine Site.</li> </ul>	
		iii) Real-time meteorological and air quality monitoring – to provide alerts for appropriate personnel when short-term dust levels increase, to allow management of the location and intensity of activities or increased controls.	
	3.11	Test the concentration of lead and other metals, initially monthly and then at frequencies determined through ongoing review.	At commencement of air quality monitoring and ongoing (with frequency regularly reviewed).
		4. Greenhouse Gas	
Reduce GHG emissions during the design, construction, and operation of the Mine.	4.1	Rehabilitate and supplement areas cleared of vegetation within additional biodiversity offset areas, which would be improved through ongoing management of the vegetation.	Progressively during operations and ongoing.
	4.2	Consider energy efficiency during the final design of processing plant with energy efficient systems installed where reasonable and practicable.	Prior to construction stage.
	4.3	Operate plant and equipment to maximise efficiency, with mine planning used to minimise vehicle wait times and idling.	Ongoing.
	4.4	Procure locally produced goods and services where feasible and cost effective to reduce transport fuel emissions.	Ongoing.
	4.5	Review cut and fill balances for earthworks to make sure that material is transported the least possible distances.	Prior to and during construction activities.
		5. Groundwater	
An accurate understanding of the characteristics of the	5.1	Conduct monitoring in nominated groundwater bores within and surrounding the Mine Site.	As documented in the Water Management Plan.
groundwater inflows to the open cut pits from all sources.	5.2	Record water pumped from the open cut pits and assess annual water use to compare against licenced entitlements.	Ongoing with review annually.
Proactive awareness and understanding of potential changes to groundwater availability and quality.	5.3	Conduct monitoring in nominated groundwater bores within and surrounding the Mine Site, including 'regional control' sites.	As documented in the Water Management Plan.

## Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	sure	Timing*			
5. Groundwater (Cont'd)						
Minimal contamination of groundwater resources by surface activities.	5.4	Management of surface water flows in accordance with the sites surface water management plan.	Ongoing.			
	5.5	Construction of the TSF in accordance with <a href="detailed">detailed</a> design.	Ongoing.			
	5.6	Monitoring of groundwater quality and implementation of remedial actions.	Ongoing and in the event of an exceedance of any agreed parameters.			
Appropriate compensation for any actual loss of groundwater availability in registered groundwater bores.	5.7	Establish acceptable contingency measures with potentially impacted landowners, should they be required in the event that the predicted lowering of the groundwater table eventuates.	Prior to operations intercepting the groundwater table for those landowners predicted to be impacted. In response to monitoring data for all others.			
An accurate groundwater model.	5.8	Review groundwater model prepared by Jacobs (2021) once data is available on actual inflows to the open cut pits and use this data to validate the model.	Within 2 years of extraction intercepting the regional groundwater table.			
A plan for groundwater management post-mining.	5.9	Prepare a Final Void Management Plan that takes into account management requirements post-mining.	Prior to completion of mining.			
		6. Surface Water				
Maximise diversion of clean water around disturbed areas to	6.1	Divert runoff from a 50ha area in upper Blackmans Gully catchment to Price Creek.	Site establishment and construction stage.			
maintain flows to downstream watercourses.	6.2	Divert Blackmans Gully away from the main open cut pit and satellite open cut pits.	Site establishment and construction stage.			
Maximise discharge of water from sediment dams to downstream watercourse (after	6.3	Construct and manage sediment dams to collect sediment-laden water from the TSF, TSF NAF stockpile area, southern barrier, oxide ore stockpile, WRE perimeter embankments.	Site establishment and construction stage and ongoing.			
treatment) as a preferential approach for management. Capture, store and re-use water where this is not feasible.	6.4	Construct all sediment dams in accordance with Volume 2E of Soils and Construction – Managing Urban Stormwater (DECC, 2008)	Site establishment and construction stage.			
Maintain the active storage capacity of all sediment dams.	6.5	Discharge water satisfying EPL conditions within 5 days of rainfall event, i.e. after confirming acceptable water quality – assuming either sediment settlement or flocculation.	Following rainfall event causing storage capacity.			

## Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Maga	uro.	Page 5 of 13
Desired Outcome	Meas		Timing*
A i d dia ah a ma a af a a		6. Surface Water (Cont'd)	A a required
Avoid discharge of any contaminated water from the containment zone.	6.6	Pump all water from the open cut pits to the open cut dewatering pond (for use in the processing plant).	As required.
	6.7	Pump all decant water to the raw water pond for use in the processing plant.	Continuous.
	6.8	Collect all runoff from the processing plant area and mining facility in the processing plant dams.	Ongoing.
	6.9	Pump water from the Leachate Management Dam to the raw water dam.	Continuous.
	6.10	Pump brine from on-site Reverse Osmosis Plant to raw water dam.	Ongoing.
	6.11	Construct and maintain bunding around all tanks containing chemicals	Site establishment and construction stage and ongoing.
	6.12	Undertake regular inspections of all pipelines and containment structures to monitor for leaks.	Ongoing during use of water supply pipeline.
Avoidance of overflow	6.13	Monitoring the water level in the decant pond.	Continuously.
from the TSF to downstream watercourses.	6.14	Cease pumping water from external supply source when TSF water level is ≤4.7m below the emergency spillway invert level.	As required.
Ensure all hydrocarbons contained within the Mine	6.15	Store all diesel and waste oil in self-bunded above ground tanks	Ongoing.
Site.	6.16	Refuel all mobile equipment (in the mining facility) in dedicated areas with perimeter bunding and spill kits.	Ongoing.
	6.17	Store all 205L/20L drums in bunded storage area(s)	Ongoing.
	6.18	Collect and remediate hydrocarbons – contaminated earth.	As required.
	6.19	Maintain an oil-water separator within the workshop / maintenance area.	Ongoing.
Manage the storage, use and spill management of other potential contaminants.	6.20	Store a range of potentially hazardous materials within bunded areas or containers at the Mine Site in accordance with a chemicals management system.	Ongoing.
	6.21	Implement and maintain a pump-out sewage management system by a licenced contractor.	Ongoing.
	6.22	Reuse all brine generated by the reverse osmosis plant in processing.	Ongoing.

Table A2.1 (Cont'd)
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Desired Outcome	Meas	UIFA	Page 6 of 13
Desired Outcome	IVICAS	7. Health Risks	riiliig
Ensure dust is controlled on site to prevent further contamination.	7.1	Prepare and implement an Air Quality Management Plan outlining the measures to manage air emissions (consistent with those considered and outlined in the Air Quality Impact Assessment).	Prior to site disturbance activities and ongoing.
Prevent contamination of surface water downstream of the Mine Site to maintain water quality standards.	7.2	Implement the Project's Water Management Plan.	Ongoing.
Manage and minimise noise and blasting impacts from the Project on the surrounding population.	7.3	Develop and implement a Construction Noise Management Plan, Blast Management Plan and Operational Noise Management Plan.	Ongoing.
Management of perceived risks and confirmation of actual impacts.	7.4	Offer lead blood level testing to Lue and district residents.	Prior to site disturbance activities and at regular intervals during operation.
	7.5	Publication of environmental monitoring results relating to lead in air and water to reduce uncertainty regarding the extent of impacts.	Ongoing during operations.
	7.6	Maintain an open-door policy and implement a good neighbour program involving regular and ongoing community engagement, providing opportunity to discuss and provide information in relation to impact monitoring and management.	Ongoing.
Management of potential mental health impacts and maximisation of positive	7.7	Provide support for health service programs in the region as part of Bowden Silver's Community Investment Program.	Ongoing.
mental health benefits.	7.8	Maximise local employment to reduce fly-in/fly-out and drive-in/drive-out employees.	Ongoing.
	7.9	Management of noise impacts so as to reduce potential for sleep disturbance (and associated mental health impact).	Ongoing.
		8. Visibility and Lighting	
Reduce the impact of the Project on the visual amenity at private	8.1	Undertake progressive rehabilitation of the Site focusing particularly on the revegetation of visible disturbed areas.	Ongoing.
residences and public roads.	8.2	Enhance the existing tree screen adjacent to Pyangle/Powells Roads.	Ongoing and expanded from site establishment and construction.
	8.3	Plant tree screens around the outer southern perimeter of the southern barrier and TSF.	As it is developed.
	8.4	Adopt a dark grey/green colour scheme for site buildings and roadside noise barriers.	During site establishment and construction.

### Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

Desired Outsome	Mana		Page 7 of 13
Desired Outcome	Meas		Timing*
	8.	, , ,	
Ensure Project-related lighting does not unreasonably impact the surrounding environment	8.5	Ensure all lighting complies with AS/NZS 4282:2019 – Control of the Obtrusive Effects of Outdoor Lighting (as amended from time to time).	Ongoing.
or operations at the Siding Spring Observatory and local astronomical	8.6	Ensure all light sources have appropriate correlated colour temperatures.	Ongoing.
observatories.	8.7	Ensure all floodlights have a maximum upcast angle of 10 degrees.	Ongoing.
	8.8	Ensure that lights with diffusing covers or with visible bare lamps that emit light above the horizontal plane are not used on the outside of buildings or structures.	Ongoing.
	8.9	Restrict the use of floodlight towers to periods of active operation.	Ongoing.
	9.	Terrestrial Ecology / Biodiversity	
Avoid and minimise impacts on terrestrial vegetation and animal	9.1	Delineate areas of native vegetation that are to be removed to prevent accidental damage or removal of retained vegetation.	Prior to each vegetation clearing program.
habitats wherever possible.	9.2	Restrict vehicles, persons and machinery from entering areas of retained vegetation (unless for required environmental monitoring or other valid purpose) to avoid unnecessary impacts to vegetation and habitat.	Ongoing.
	9.3	Implement a pre-clearance Survey Protocol for areas of native trees and shrubs including a two-stage clearing protocol for all hollow-bearing trees.	Prior to each vegetation clearing program.
	9.4	Mark all hollow-bearing trees to be removed and catalogue their species and approximate dimensions.	Prior to each vegetation clearing program.
	9.5	Implement a seed collection plan with measures and procedures to collect, maintain and propagate from native seed sources.	Ongoing to the extent required for rehabilitation.
	9.6	Prepare and implement a feral animal management plan including an inspection program to monitor for feral animal issues.	Ongoing.
	9.7	Prepare and implement a weed management plan to monitor and, as required, control weed species within the Mine Site.	Ongoing.
Rehabilitate disturbed areas to create a final landform that maintains or improves biodiversity values of the Site.	9.8	Prepare a Rehabilitation Management Plan in accordance with the latest NSW Resources Regulator requirements / guidelines.	Prior to any ground disturbance.
Secure biodiversity offsets to offset residual biodiversity impacts.	9.9	Implement an approved biodiversity offset strategy.	Progressively in accordance with approved staging.

## Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	sure	Timing*
9.		Terrestrial Ecology / Biodiversity (Cont'd)	
Minimise the risk of fauna interaction with the TSF / Cyanide.	9.10	Construct the TSF in a way that minimises the risk of shallow ponds forming on uneven ground after rain events.	During TSF construction.
	9.11	Contour the floor of the TSF during construction to avoid island formation.	During TSF construction.
	9.12	Prepare and implement a Cyanide Management Plan including measures to contain cyanide, maintain levels within the prescribed limits, monitor and inform the need for contingency measures.	Prior to use of cyanide.
		10. Aquatic Ecology	
Avoid and minimise impacts on aquatic vegetation and habitats where possible.	10.1	Where practical, treat water to be released from all existing dams to eradicate the invasive eastern gambusia.	Prior to any discharge of water from existing dams.
	10.2	Screen any discharge pipes to minimise any eastern gambusia from entering surrounding watercourses, if treatment in 10.1 is not successful.	Ongoing during water discharges.
	10.3	Underbore any watercourses where significant water flows are present at the time of the construction of the water supply pipeline.	During water supply pipeline construction.
	10.4	Implement a monitoring program within Hawkins and Lawsons Creeks and associated alluvial aquifers to monitor potential impacts to aquatic biota, habitat and stygofauna.	Prior to the commencement of construction activities and ongoing throughout operations.
		11. Traffic and Transport	
Achieve safe and efficient road transport operations.	11.1	Prepare and implement a detailed Traffic Management Plan, incorporating a Driver's Code of Conduct, to safely manage any traffic impacts during all stages of the Project.	3 months prior to commencement of the site establishment and construction stage and for the Project-life.
	11.2	Deliver equipment and consumables necessary for the construction and operation of the Project and despatch mineral concentrates outside heavy vehicles restriction periods designated as school bus operation times.	Ongoing.
Mitigate potential traffic impacts to local road users.	11.3	Spread commencement and finish times of operational shifts at different times throughout the day.	Ongoing.

### Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	ure	Page 9 of 13 Timing*
	12.	Soils and Land and Soil Capability	
Minimise the clearing of native vegetation for the	12.1	Undertake a weed control program (if required) in areas to be stripped of topsoil.	Prior to soil stripping.
stockpile.	12.2	Where practical, transfer salvaged subsoil and topsoil directly to rehabilitation areas.	During soil stripping campaigns.
	12.3	Limit topsoil stockpile heights to 2m and stabilise with a well-fertilised non-persistent cover crop.	Ongoing.
	12.4	Limit subsoil stockpiles height to 5m and 1m of topsoil and stabilise with a well-fertilised non-persistent cover crop.	Ongoing.
Encourage organic carbon accumulation, promote microbial activity and minimise erosion.	12.5	Increase the thickness of topsoil and subsoil placed on the southern barrier to effectively provide an additional area to stockpile soil.	During southern barrier construction.
Minimise losses through erosion caused by the practices of soil stripping	12.6	Selectively strip topsoil and place in rehabilitation areas or in nominated stockpile areas.	During soil stripping campaigns.
to maximise the value of soil as a resource for rehabilitation purposes.	12.7	Add lime to the topsoil and subsoil prior to each scraping pass.	During soil stripping campaigns.
	12.8	Apply coarse grade gypsum prior to stripping and stockpiling of the 'Alluvium – medium quality' Soil Landscape Unit where required.	During soil stripping campaigns.
	12.9	Avoid stripping or spreading soils when either very dry or wet.	During soil stripping campaigns.
Minimise the impact on soil resources, terrestrial vegetation during	12.10	Prevent vehicle access on soil stockpiles, except where required for monitoring, seeding, addition of soil ameliorants, or weed control.	Ongoing.
stockpiling.	12.11	Place silt-stop fencing immediately down-slope of all stockpiles until stable vegetation cover is established. Return all material recovered from the silt-stop fencing to the stockpile.	Ongoing.
	12.12	Implement a weed eradication program should unacceptable weed generation be observed on soil stockpiles.	Ongoing.
	12.13	Establish and maintain an inventory of topsoil and subsoil resources (available and stripped) and reconcile with rehabilitation requirements.	Ongoing.

#### Table A2.1 (Cont'd)

**Updated Environmental Management and Monitoring Measures** 

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Desired Outcome	Meas	ure	Timing*
		13. Aboriginal Cultural Heritage	
Provide appropriate protection to the existing and any unknown Aboriginal artefacts.	13.1	Undertake archaeological field surveys with the local Aboriginal community of the areas within the water supply pipeline corridor and the proposed relocated Maloneys Road corridor that have not yet been surveyed.	Prior to any surface disturbance within the subject areas.
	13.2	Prepare and implement a Heritage Management Plan to manage those identified and any potentially unknown sites of Aboriginal heritage value within the Mine Site, relocated Maloneys Road and the water supply pipeline corridor.	3 months prior to commencement of the site establishment and construction stage and for the Project- life.
	13.3	Install and maintain protective barriers around all identified Aboriginal cultural heritage sites within the Mine Site that are located in areas that would not be disturbed by Project-related activities.	Prior to the commencement of the site establishment and construction stage.
	13.4	Adjust the water supply pipeline route, where feasible, to avoid disturbance of any identified Aboriginal cultural heritage sites.	During the site establishment and construction stage.
	13.5	Install and maintain protective barriers around identified Aboriginal cultural heritage sites in the vicinity of the water supply pipeline corridor and the proposed relocated Maloneys Road corridor for the duration of construction activities.	During the site establishment and construction stage.
	13.6	Arrange for the full salvage and storage in a "Keeping Place" of Aboriginal objects at all identified Aboriginal cultural heritage sites that would be directly impacted as the result of Project-related disturbance.	Prior to disturbance commencing and in accordance with a Heritage Management Plan.
Prevent further inadvertent impact if any Aboriginal cultural heritage sites are identified.	13.7	Stop work immediately and report the find to BCD and a qualified archaeologist to assess the significance of the site. If the site contains bones indicative of a human burial, notify the Police immediately.	Ongoing.
	1	14. Historic Heritage	
Provide appropriate protection to the existing and any unknown historic heritage sites.	14.1	Prepare and implement a Heritage Management Plan to manage those identified and any potentially unknown sites of historic heritage value within the Mine Site, relocated Maloneys Road corridor and the water supply pipeline corridor.	3 months prior to commencement of the site establishment and construction stage and for the Project- life.
Prevent further inadvertent impact if any historic heritage sites are identified.	14.2	Stop work immediately and report the find to BCD and a qualified archaeologist to assess the significance of the site.	Ongoing.

### Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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Desired Outcome	Meas	IIIO	Page 11 of 13
Desired Outcome	ivieas		Timing*
	I	15. Public Safety Hazards	I .
Ensure the risk of bush fire attack is minimised at	15.1	Maintain appropriate Asset Protection Zones around key Mine Site components.	Ongoing.
key Mine Site components.	15.2	Ensure employees are trained in the proper use of firefighting equipment held on site.	Ongoing.
	15.3	Make Mine Site firefighting equipment available to the local Rural Fire Service in the event of a bush fire on land surrounding the Mine Site.	As required.
Minimise the risk of bush fire ignition from mining	15.4	Restrict work in heavily vegetated areas.	During high fire danger periods.
operations.	15.5	Develop procedures for hot works to prevent ignition sources for a bush fire.	Ongoing.
	15.6	Consult with the local Rural Fire Service.	Prior to each bush fire season and any controlled burns.
Ensure leaks and spills of sodium cyanide and	15.7	Ensure bunding around the on-site mini sparge system complies with AS NZS 4452:1997.	Ongoing.
cyanide solution are avoided on site and leaks	15.8	Ensure the processing area is bunded to contain any processing leaks.	Ongoing.
and spills of sodium cyanide during transport are avoided.	15.9	Ensure operators in contact with cyanide are licenced and trained in emergency response and/or HAZMAT.	Ongoing.
	15.10	Ensure cyanide transporters are certified as compliant with the Cyanide Code's Principles and Transport Practices.	Ongoing.
	15.11	Ensure cyanide transporters are compliant with the <i>Australian Dangerous Goods Code</i> with drivers and vehicles licensed to transport DGs.	Ongoing.
Minimise risks associated with the on-site use and storage of blasting agents	15.12	Implement quality assurance procedures to ensure blasting agents meet required specifications.	Ongoing.
(e.g. ANFO and ANE).	15.13	Ensure blasting agents are packaged in accordance with the <i>Australian Dangerous Goods Code</i> .	Ongoing.
	15.14	Ensure appropriate separation distances between blasting agents and the Mine Site boundary are maintained.	Ongoing.
	15.15	Ensure emergency response and evacuation procedures are in place.	Ongoing.
		16. Economic	
Maximise local employment training, and	16.1	Develop and implement a Local Employee and Procurement Strategy.	Site establishment and construction.
engagement.	16.2	Give preference to local employees.	Ongoing.
	16.3	Provide ongoing training and certification opportunities for local community members to ensure they have the necessary skills to work in mining.	Ongoing.

Desired Outcome	Meas	ure	Page 12 of 13 Timing*
	IIIGUG	16. Economic (Cont'd)	<b>5</b>
Involvement with local businesses to boost local	16.4	, ,	Ongoing.
economy.	16.5	Provide service provision opportunities and compliance requirements of business to secure contracts.	Ongoing.
	16.6	Collaborate with local businesses and encourage local businesses to meet the requirements of the Project for supply contracts.	Ongoing.
	16.7	Develop relevant networks to assist qualified local and regional businesses tender for provision of goods and services to support the Project.	Ongoing.
Support local sporting, social and community groups to ensure community directly benefits from the Project.	16.8	Implement a Planning Agreement with the Mid-Western Regional Council.	Agreement in place prior to commencement of site establishment and construction.
	16.9	Develop and implement a Community Investment Program.	Initial funding released within 12 months of commencement of mining operations. Then ongoing during operations.
		17. Social	
To enhance local values and address community needs within the Lue, Rylstone, Kandos, Mudgee and surrounding localities.	17.1	Develop and implement a Community Investment Program.	Ongoing. Expanded program prior to commencement of mining operations. Then ongoing.
Contribution to the provision of public amenity and public services, transport or other infrastructure requirements as agreed with Council.	17.2	Implement a Planning Agreement with the Mid-Western Regional Council.	Agreement in place prior to commencement of site establishment and construction.
Maximisation of the economic benefits of the Project within in the Mid-Western Regional LGA.	17.3	Develop and implement a Local Employee and Procurement Strategy.	Prior to the commencement of site establishment and construction.
Maintenance and further development of Company-community	17.4	Develop and implement a Good Neighbour Program which outlines ongoing and effective communication and engagement.	Prior to the commencement of mining operations.
relationships.	17.5	Employ a dedicated Community Liaison officer to manage the ongoing engagement and monitoring and management commitments.	Ongoing.

### Table A2.1 (Cont'd) Updated Environmental Management and Monitoring Measures

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<b>Desired Outcome</b>	Measure		Timing*
17. Social (Cont'd)			
Wholistic and adaptive management based upon monitoring/feedback and evaluation to minimise potential negative impacts and enhance benefits from the Project.	17.6	Develop and implement a Social Impact Management Plan that provides for monitoring and evaluation of social and community aspects of the Project and applies adaptive management to minimise potential impacts and maximise benefits.	Prior to commencement of mining operations.
	17.7	Prepare and implement appropriate complaint receipt / response and incident notification / reporting processes.	Ongoing during operations.
Keeping the community informed, maintaining transparency, and remaining accountable.	17.8	Public reporting of relevant statistics, monitoring results and engagement outcomes.	Ongoing during operations.
18. <u>Seepage Management</u>			
Reduce and manage seepage risks from the TSF.	18.1	Install a system of vibrating wire and standpipe piezometers upstream and downstream of the foundation grouting, beneath the embankment, at the toe of the embankment.	During site establishment and construction.
	18.2	Install groundwater monitoring bores downgradient of the TSF to monitor for any seepage migration.	During site establishment and construction.
	18.3	Monitor all vibrating wire and standpipe piezometers as well as groundwater monitoring bores during and following TSF operations.	As described in a Water Management Plan.
	18.4	Undertake inspections of the tailings discharge pipelines, water return pipeline, discharge points, decant system and decant pond, all of which would be fully documented, and where appropriate photographed.	As described in a TSF Operations and Maintenance Plan.
	18.5	Undertake weekly inspections of the external embankment and associated structures, the tailings beach, decant pond level and all monitoring installations.	As described in a TSF Operations and Maintenance Plan.
	18.6	Prepare a comprehensive Trigger Action Response Plan that is associated with monitoring outcomes.	As described in a Water Management Plan.
	18.7	Comply with all reporting and regulatory requirements of DPIE, EPA and Dams Safety NSW throughout the life of the development.	As required.
	18.8	Undertake independent reviews and audits against contemporary engineering and environmental standards.	As required.

#### **BOWDENS SILVER PTY LIMITED**

Bowdens Silver Project

**SUBMISSIONS REPORT** 

Report No. 429/33

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