

HERA MINE AND
FEDERATION MINE

10/04/2024

WASTE ROCK
MANAGEMENT PLAN



TABLE OF CONTENTS

1. INTRODUCTION	4
1.1. Background.....	4
1.2. Purpose and Scope.....	6
2. LEGAL AND OTHER REQUIREMENTS	12
2.1. SSD 24319456.....	12
2.2. Environment Protection Licence	13
2.3. Statement of Commitments	13
2.4. Consultation.....	13
3. BASELINE ENVIRONMENT	14
4. MANAGEMENT MEASURES	15
4.1. Existing Management Measures	15
4.1.1. Waste Rock Characterisation Procedures	16
4.1.2. Stockpiling of Waste Rock	16
4.1.3. Management of WREA Leachate Dam and Lined Leachate Pond	17
4.1.4. Management of PAF (Surface and Underground).....	17
4.1.5. Management of NAF (Surface and Underground)	17
4.2. Additional Waste Rock Management Measures	17
4.2.1. Segregation of NAF and PAF Waste Rock	18
4.2.2. Management of PAF Waste Rock (Surface and Underground).....	18
5. PAF WASTE ROCK MONITORING PROGRAM	19
5.1. Surface water monitoring	19
5.2. Groundwater monitoring.....	20
5.3. Visual Waste Rock Monitoring	20
6. CONTINGENCY PLAN	21
6.1. Trigger Action Response Plans.....	21
6.2. Adaptive Management	25
7. INCIDENT AND COMPLAINT MANAGEMENT	26
7.1. Incident and Non-compliance Protocol.....	26
7.2. Complaints Management.....	26
8. REPORTING	28

8.1. Annual Reporting	28
8.2. Incident Reporting	29
8.3. Non-Compliance Reporting	29
8.4. Independent Environmental Audit	29
8.5. Access to Information	30
9. ROLES AND RESPONSIBILITIES	31
10. TRAINING AND AWARENESS	32
11. REVIEW AND IMPROVEMENT	33
12. REFERENCES	34

Tables

Table 1: Key Site Infrastructure	5
Table 2: Relevant SSD 24319456 Conditions	12
Table 3: Consultation	13
Table 4: Existing Waste Rock Management Measures.....	15
Table 5: Estimated Waste Rock Generation	16
Table 6: WREA Leachate Monitoring	19
Table 7: WREA Groundwater Monitoring	20
Table 8: Trigger Action Response Plan	22
Table 9: Contact Details for Complaints.....	26
Table 10: Roles and Responsibilities	31

Figures

Figure 1: Regional Locality	8
Figure 2: Site Layout.....	9
Figure 3: Hera Mine Layout.....	10
Figure 4: Federation Mine Layout	11

Appendix

Appendix A – Consultation

Version	Date	Description	Author
V0.1	27/07/2023	Draft for Consultation	IEMA and Aurelia Metals
V0.2	27/09/2023	Final for DPE Submission	IEMA and Aurelia Metals
V0.3	29/02/2024	Final for DPHI Re-submission	IEMA and Aurelia Metals
V0.4	10/04/2024	Final for DPHI Re-submission	IEMA and Aurelia Metals

1. INTRODUCTION

1.1. Background

Hera Resources Pty Ltd (Hera Resources), a wholly owned subsidiary of Aurelia Metals Limited (Aurelia), owns and maintains Hera Mine, an underground metalliferous mine, approximately 100km southeast of Cobar and 4km south of Nymagee in the central west of New South Wales (NSW). Hera Resources operated Hera Mine from 2014 until it entered care and maintenance in early 2023.

Hera Mine is a State Significant Development (SSD) and commenced operations in 2012 under the former *Environmental Planning and Assessment Act 1979* (EP&A Act) Part 3A Major Project Approval development consent MP10_0191, which has been modified six times.

The Federation Project (the Project) is the proposed development of an underground metalliferous mine located in central-western NSW, approximately 15 kilometres (km) south of the Nymagee township and 10km south of Hera Mine. High grade mineral deposits were discovered at the Federation site in 2019 with subsequent drilling operations identifying a substantial gold-lead-zinc-copper-silver mineral resource. The Project is an SSD for which an Environmental Impact Statement (EIS) was prepared under the EP&A Act. Hera Resources submitted an EIS in February 2022, an EIS Amendment Report in October 2022 and a Response to Submissions Report (responding to submission on the EIS) in October 2022.

Mining of the Federation deposit will allow for a transition of mining operations from Hera Mine to Federation, as ore from the Federation deposit replaces ore from the Hera Mine. As part of the Project, it was intended to rescind/surrender Hera Mine's development consent MP10_0191 with activities at Hera Mine incorporated into the SSD approval for the Project.

Development consent ('the consent') for the Project (SSD 24319456) was granted on 2 March 2023. The consent requires that 'within 12 months of the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, the Applicant must surrender development consent MP10_0191 for the Hera Gold Mine. The Project's consent includes the amalgamation of Hera Mine's development consent conditions with the consent conditions for the Project into a single consolidated consent for both Hera Mine and Federation Mine as well as connecting infrastructure, herein referred to as the Site. Within the Site, the consent authorises activities within the 'approved disturbance area'.

Following the mineral discovery, an Exploration Decline Program was approved for a bulk sample and supporting infrastructure at the Federation Site in August 2021 by the Resources Regulator under Part 5 of the EP&A Act and section 23A(4) of the *Mining Act 1992*.

Key infrastructure approved via the consent for the Site is outlined in **Table 1**.

Table 1: Key Site Infrastructure

Project Element	Description
Mining Method	Underground mining via longitudinal retreat long hole stopping method
Management of Waste Rock	<p>During operations, waste rock is stored on designated pads or utilised for backfilling underground stopes. Post mining, potentially acid forming waste rock will be returned underground, and non-acid forming waste rock will be returned underground, used for backfilling the box cut or used for other rehabilitation purposes.</p>
Processing Plant	<p>The existing processing plant includes a Run of Mine (RoM) pad, Waste Rock Emplacement (WRE), crushing, grinding and screening operations, gravity separation, and flotation circuits capable of processing up to 505 ktpa of ore.</p> <p>The new processing plant is anticipated to be commissioned early to mid-2024 at Hera Mine capable of processing 750 ktpa of ore once at full operational capacity. Key elements of the proposed processing plant include:</p> <ul style="list-style-type: none"> • three stages of crushing followed by ball milling with hydrocyclone classification; • gravity separation to recover gold from the milling circuit recirculating load, followed by cyanide leaching of the gravity concentrate; • sequential flotation to produce separate copper, lead and zinc concentrates; and • concentrate thickening and filtration. <p>Tailings thickening and filtration, and disposal by both underground paste backfill at Federation Mine and surface storage in the approved Hera Mine TSF.</p>
Management of Tailings	<p>Tailings will be either placed into the approved Tailings Storage Facility at Hera Mine or returned to Federation Mine for placement underground as paste backfill.</p> <p>The preferred backfill method at Federation Mine is cemented paste fill using tailings. The tailings paste plant will be located adjacent to the stoping footprint to allow gravity reticulation of tailings paste fill down dedicated boreholes and laterally through an underground paste distribution system.</p> <p>The shotcrete batch plant will be co-located with the tailings paste fill plant. This plant will provide an ongoing supply of shotcrete for ground support requirements underground and concrete for miscellaneous construction works.</p>
Power Generation	<p>The preferred option for power generation at Federation Mine will be by a gas plant at Hera Mine with power transferred by overhead powerlines. A proposed solar farm to be constructed at Hera Mine will offset gas requirements. An option for a solar farm and gas generators at Federation Mine is also being considered if separate power generation is the preferred option in which case transmission lines will not be required.</p> <p>The Federation Mine will initially be powered by diesel generators while new power generation capacity is constructed.</p>
General Infrastructure	Internal roads, ablutions block, administration buildings, workshop and stores, sewage treatment and treated effluent irrigation, diesel storage tanks, potable water treatment, waste rock storage, underground vents, sub station, paste plant, laydown area, topsoil stockpiles, ROM pad, box cut, magazines, haul roads, telecommunications tower, surface extraction areas, ventilation rises, access roads, heavy vehicle corridors, overhead transmission lines and concentrate stores.
Transport	Ore will be transported from Federation Mine to Hera Mine via Burthong Road. Tailings will be transported from Hera Mine to Federation Mine via Burthong Road. At the peak of mining, ore and tailings transport is estimated to be an average of 75 vehicle trips (one-way movements) per day. Concentrate will be transported via road from Hera Mine to Hermidale Siding with an average of approximately 12 vehicle trips per day at the peak of concentrate transport.

Project Element	Description
Water Management	<p>The processing plants generate the majority of Site's water demand. Water will primarily be sourced from underground workings and pumped to the surface. A network of production bores will also be established which will supplement the existing production bores.</p> <p>The maximum groundwater extraction forecast by the site water balance model is 530 megalitres per year (ML/year), which is within the existing licenced volume of 543 ML/year.</p> <p>Hera Mine</p> <p>The water management system at the Hera Site includes the diversion of clean water runoff around upslope areas of the site, the collection of water from disturbed areas and the discharge of water to Box Creek. The key elements of the Hera water management system include:</p> <ul style="list-style-type: none"> • clean water runoff from undisturbed catchment areas within and upslope of the site. These flows may be diverted and discharged off site without treatment or licensing; • the dirty water management system which consists of a series of dirty water drains. Sediment Basin 1 and Sediment Basin 2 were used as dirty water storages during construction and have since been combined into a larger contaminated water storage which collects runoff from the processing plant area; and • raw water system supplied from production bores around the site. The production bores transfer water to the Back Tank (located beside Back Dam). Water from the Back Tank is transferred to the Feed Water Tank. The House Dam receives surface water from the clean water catchment and the House Bore (production bore). <p>Federation Mine</p> <p>A water management system will be implemented at the Federation Mine. Key elements include the diversion of clean water runoff around the mine, and the collection of water from disturbed areas and the underground. Dirty (sediment) water is captured in catch drains and collected in the sediment basin within the footprint of the Stormwater Retention Pond. Runoff from the PAF pads will drain to Lined Leachate Ponds. Runoff from the box cut will report down the decline and be dewatered as part of the underground dewatering system to the Dewatering Pond. Water contained in the Lined Leachate Ponds, Stormwater Retention Pond and Dewatering Pond will be recirculated for reuse within the Hera Mine water management system by the water pipeline between Federation Mine and Hera Mine.</p>
Services Corridor	<p>Linear infrastructure in the 23 m wide, 14.3 km long services corridor (see Figure 2) includes:</p> <ul style="list-style-type: none"> • Electricity transmission lines (if required) • Water pipeline • Access track • Tailings pipeline and return water line (potentially) • Communication infrastructure (potentially).

Infrastructure at Hera Mine will be developed to support Federation Mine, primarily the new processing plant and solar farm.

The majority of ore from Federation Mine will be trucked to Hera Mine for processing. However, over the first four years of operations up to 750,000 tonnes (up to 200,000 tpa) will be transported to Peak Mine for processing while the new processing plant is constructed and brought to operational capacity. Federation Mine is expected to produce up to 6.95 million tonnes of ore over a 12-to-14-year period.

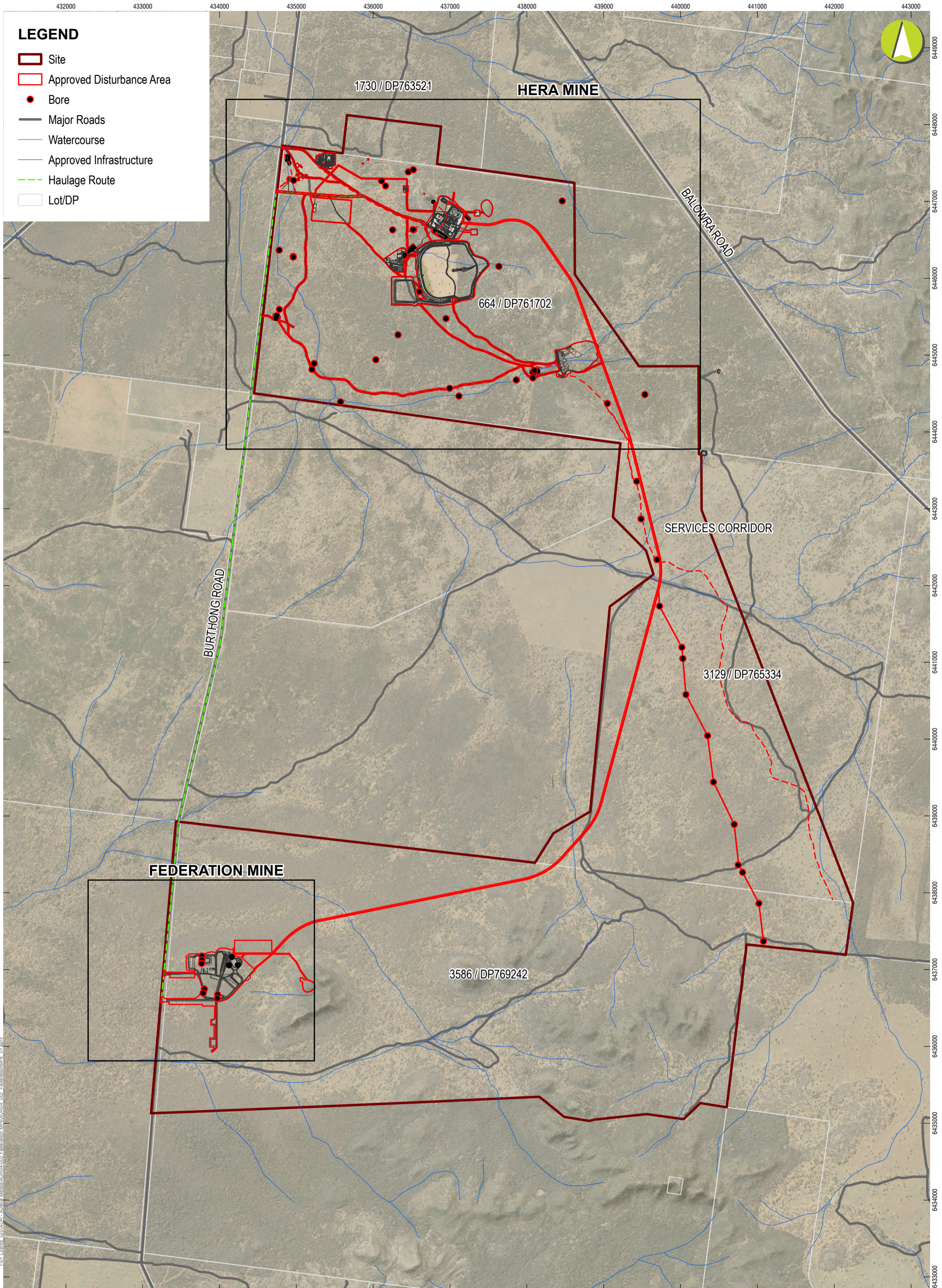
The regional locality of Hera/Federation Mine is shown in **Figure 1** and a general site layout is in **Figure 2**. Detailed site layouts of Hera Mine and Federation Mine are shown in **Figure 3** and **Figure 4** respectively.

1.2. Purpose and Scope

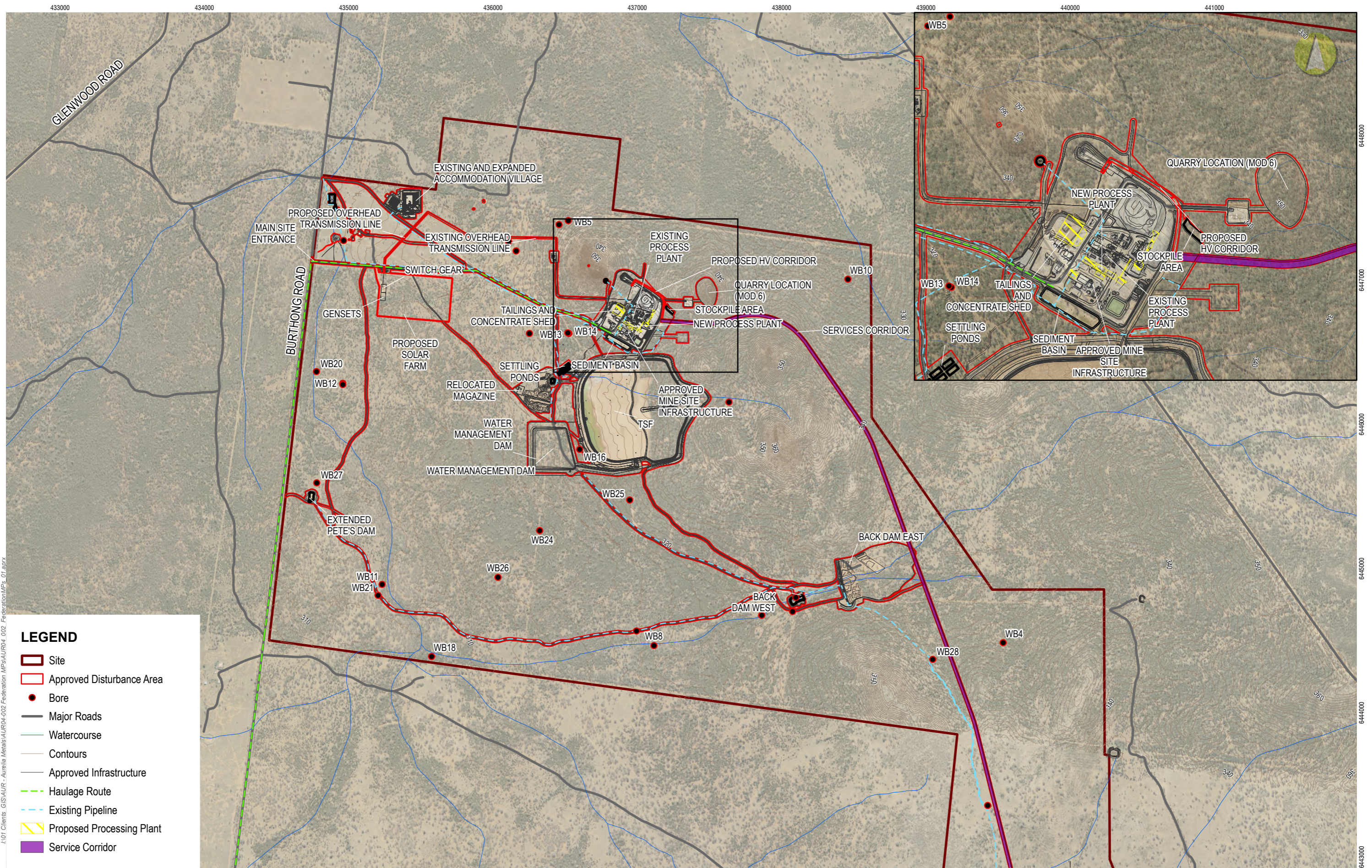
This Waste Rock Management Plan (WRMP) has been prepared in accordance with condition B43(iv) of SSD 24319456 and addresses the management of waste rock at the Site. This WRMP has been prepared as a sub-plan of the Site Water Management Plan required under condition B43 of the consent.

All management activities at Site will be carried out generally in accordance with the EIS, the conditions of the consent, all written directions from the Planning Secretary or other relevant authorities, and the approved development layout.

Hera Resources implements an Environmental Management Strategy to maintain an environmental management framework at the Site.



Aurelia Metals - SSD 24319456

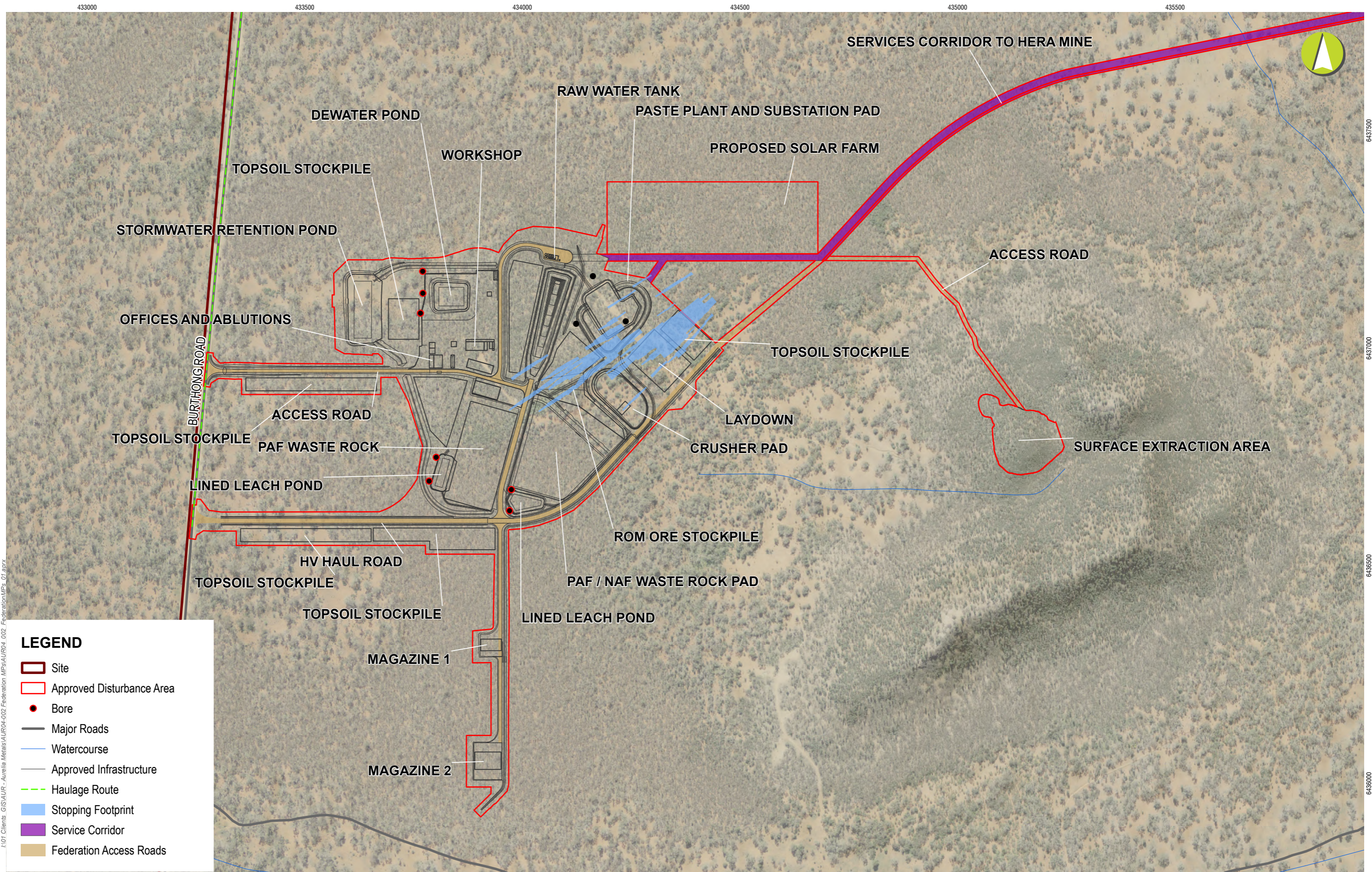


- LEGEND**
- Site
 - Approved Disturbance Area
 - Bore
 - Major Roads
 - Watercourse
 - Contours
 - Approved Infrastructure
 - Haulage Route
 - Existing Pipeline
 - Proposed Processing Plant
 - Service Corridor

0 190 380 570 760
Scale: 1:24,000

GDA2020 MGA Zone 55
24/02/2023

Aurelia Metals - SSD 24319456



I:\01 Clients - GIS\AUR - Aurelia Metals\AUR04-002 Federation MP\AUR04-002 Federation MPs_01.aprx

0 60 120 180 240
Scale: 1:8,000

GDA2020 MGA Zone 55
24/02/2023

Aurelia Metals - SSD 24319456

2. LEGAL AND OTHER REQUIREMENTS

2.1. SSD 24319456

SSD 24319456 stipulates the required criteria that the construction and operational activities of the Site must comply with and sets out the core requirements of this WRMP. Relevant conditions associated with this approval (including Statement of Commitments) and where they have been addressed in this document are reproduced in **Table 2**.

Table 2: Relevant SSD 24319456 Conditions

Condition No.	Condition	Where Addressed
A4	The conditions of this consent and directions of the Planning Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and the document/s listed in condition A2(c). In the event of an inconsistency, ambiguity or conflict between any of the document/s listed in condition A2(c), the most recent document prevails to the extent of the inconsistency, ambiguity or conflict.	Noted
Water Management Plan (Waste Rock Management Plan)		
(The Applicant must prepare a) Waste Rock Management Plan that includes:		
B43(iv)	<ul style="list-style-type: none"> a detailed description of the procedures to be implemented to monitor and manage potential acid forming material; 	Section 4
	<ul style="list-style-type: none"> reference to 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 actions); 	Section 5
	<ul style="list-style-type: none"> measures to ensure effective isolation of potential acid forming material in waste rock storage areas; 	Section 4
	<ul style="list-style-type: none"> procedures to ensure that material relocated underground does not, to the extent reasonable and feasible, further oxidise or cause impact to groundwater; 	Section 4
	<ul style="list-style-type: none"> notwithstanding the above, trigger levels for any material that has oxidised to the extent that it cannot be placed underground without impacting groundwater quality 	Section 6.1
Management Plan Requirements		
C4	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include where relevant:	Section 3
	a) summary of relevant background or baseline data;	
	b) details of:	
	i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2
	ii) any relevant limits or performance measures and criteria; and	-
	iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 5
	c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	-
d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 4	
e) a program to monitor and report on the:		
i) impacts and environmental performance of the development; and	Section 5	
ii) effectiveness of the management measures set out pursuant to paragraph (d);	Section 5 Section 6	

Condition No.	Condition	Where Addressed
	f) 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;	Section 6.1
	g) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 11
	h) a protocol for managing and reporting any:	Section 8.2
	i) incident, non-compliance or exceedance of any impact assessment criterion or performance measure;	Section 8.3
	ii) complaint; or	Section 7.2
	iii) failure to comply with other statutory requirements;	Section 7.1
	i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	Section 8.1
	j) a protocol for periodic review of the plan.	Section 11
<p>Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</p>		

2.2. Environment Protection Licence

There are no specific conditions within EPL 20179 relating to the management of waste rock.

2.3. Statement of Commitments

There are no specific EIS commitments relating to the management of Waste Rock.

2.4. Consultation

Consultation for this WRMP is aligned with the Water Management Plan (WMP) under Condition B43(b) which requires this management plan to be prepared in consultation with DPE Water (now DCCEEW), EPA, Resources Regulator (RR) and Council (Cobar Shire Council (CSC)). Feedback from the relevant authorities is provided in **Appendix A** and outlined in **Table 3**.

Table 3: Consultation

Authority	Comments
DPE Water	DPE Water responded 7/08/2023 with no comment.
EPA	EPA responded 20/09/2023 and declined to comment.
RR	RR responded 4/09/2023 with no comment.
Council (CSC)	On 25/07/2023 CSC notified Hera Resources in writing that the Site's waste rock management is unlikely to impact on CSC owned infrastructure. Therefore, provided this WRMP is prepared in accordance with the consent, CSC advised that no further consultation on the WRMP is required. Aurelia Metals have noted this comment and have prepared this management plan accordingly.

3. BASELINE ENVIRONMENT

An assessment of the Site's geochemistry was prepared for the EIS by Terrenus Earth Sciences entitled *Geochemical Assessment of Potential Waste Rock and Tailings - Federation Project* dated 5 November 2021 (EIS-GA). The assessment found the geochemical environment at the Site would generally generate fresh waste rock classified as Potentially Acid Forming (PAF) while weathered waste rock is expected to be mostly Non Acid Forming (NAF).

Of a potential 1.5 Mt of waste rock to be mined, about 60% will report to the surface during the first seven years (approximately) of operations, with the remainder disposed underground as backfill. Waste rock brought to the surface will be placed into the appropriate Waste Rock Emplacement Areas (WREAs), depending upon the environmental geochemical classification (to segregate NAF from PAF waste rock as much as practical). Run-off and seepage from the waste rock stockpile areas will be captured in Lined Leachate Ponds adjacent to each WREA at Federation Mine (see **Figure 4**). Captured runoff will be treated as appropriate before use in the mine water management system as described in the Site's *Hera Mine and Federation Mine – Water Management Plan (2023)* (WMP).

Weathered waste rock generated from the box-cut is expected to be NAF possessing a very low potential to generate acid and metalliferous drainage (AMD) and low potential to generate salinity and neutral mine drainage (NMD). Waste rock from the box-cut will be stockpiled separately to fresh rock, as much as practical, and potentially used to backfill the box-cut, for other rehabilitation and construction activities or transported to Hera Mine and disposed underground.

Fresh waste rock is expected to be PAF, posing a high potential to generate low to moderate-level AMD (as a bulk material). Fresh rock from the underground will report to the waste rock stockpiles, where run-off and seepage (leachate) will be captured and treated as required before use in the mine water management system. PAF waste rock that is brought to surface will either be transported back underground (during or post mining operations) for use as backfill or transported to Hera Mine and disposed underground. No PAF waste rock is proposed to remain at the surface at closure. PAF waste rock used as underground backfill would be placed below the final groundwater level (approximately 60 to 80m below natural surface) where oxidation within the saturated zone would be negligible as per the EIS-GA. As such, backfilled waste rock would pose a very low environmental risk with respect to Acid Mine Drainage (AMD) and Neutral Mine Drainage (NMD).

4. MANAGEMENT MEASURES

4.1. Existing Management Measures

A summary of waste rock management measures existing at Hera Mine which are to be continued and expanded for Site are outlined in **Table 4**. Further detail is provided in the following sections.

Table 4: Existing Waste Rock Management Measures

Source	Control Procedure	Person Responsible
Waste Rock Characterisation Procedures		
Potentially Acid Forming Material	<ul style="list-style-type: none"> Geology department knowledge of local sulfide zones will be used to minimise extraction of PAF material. Waste rock characterisation testing including static Net Acid Generation (NAG) testing on rock chip samples. 	Geology Superintendent
Stockpiling and Transportation of Waste Rock		
Waste Rock Generation	<ul style="list-style-type: none"> The generation of waste rock will be minimised as far as practicable through mine planning. 	Geology Superintendent
Waste rock pads	<ul style="list-style-type: none"> Waste rock will be placed in stockpiles on designated pads. Runoff from waste rock pads is to be captured in Lined Leachate Ponds adjacent to the pads. 	Mine Manager
Waste rock emplacement design	<ul style="list-style-type: none"> Waste rock stockpiles will be designed to limit runoff and erosion as far as practicable. 	Mine Manager
Management of Lined Leach Ponds and Leachate Dam		
Seepage	<ul style="list-style-type: none"> Leachate ponds are lined with low permeability material. Visual inspections will be conducted on a regular basis to check for signs of seepage. 	Environment Superintendent
Storage capacity	<ul style="list-style-type: none"> Lined Leachate Pond will be maintained with 300mm freeboard. Leachate Dam will be maintained Leachate Dam and Lined Leach Ponds will be inspected following a significant rainfall event (>25mm). 	Mine Manager
Leachate dam water management	<ul style="list-style-type: none"> Water in Leachate Dam and Lined Leachate Ponds will be tested for various water quality parameters (discussed in Section 5). Groundwater monitoring bores adjacent to the Leachate Dam and Lined Leachate Ponds will be monitored for signs of AMD or NMD. 	Environment Superintendent
Management of PAF (Surface and Underground)		
Water infiltration	<ul style="list-style-type: none"> Water infiltration into the WREA will be minimised through the regular traversing of heavy machinery over the WREA. The surface of the WREAs will be graded as required to ensure water runs off into the Lined Leachate Ponds and leachate dam and does not pool on the PAF material. 	Mine Manager
Oxidisation	<ul style="list-style-type: none"> Oxidisation of PAF material will be monitored through visual inspections and acidity testing of runoff/leachate prior to transportation to underground (discussed further in Section 5). If waste rock within the WREA is identified as being significantly oxidised, a risk assessment will be completed to determine the best course of action to manage potential AMD/NMD impacts (discussed further below). 	Mine Manager
PAF emplacement	<ul style="list-style-type: none"> Where possible, PAF waste rock is not brought to surface and is used immediately as backfill in stope voids. 	Mine Manager

Source	Control Procedure	Person Responsible
	<ul style="list-style-type: none"> PAF waste rock, or other material identified to have high sulphur reactivity, will be given preferential placement underground. 	
Inundation	<ul style="list-style-type: none"> Waste rock emplaced underground will be inundated following the cessation of dewatering, therefore limiting oxidisation. 	Environment Superintendent
Management of NAF (Surface and Underground)		
NAF emplacement	<ul style="list-style-type: none"> Where required, NAF will be used within the Site for construction purposes and landform establishment. NAF not required for surface activities will be placed underground. 	Mine Manager
Management of Imported Waste Rock		
Imported waste rock	<ul style="list-style-type: none"> Any waste rock imported from other Aurelia operations in the region will be placed within the Site's WREA and managed in accordance with this WRMP. 	Mine Manager

4.1.1. Waste Rock Characterisation Procedures

Geochemical data from 201 drill core samples was obtained for the Federation Mine during the Geochemical Assessment (EIS-GA) conducted as part of the EIS. The sampling at Federation Mine generally targeted the dominant waste rock sources including the box-cut and the decline at various depths and locations. Similar sampling was conducted at Hera Mine as part of the Hera Mine Environmental Assessment (RW Corkery, 2011).

Static testing such as Net Acid Production Potential (NAPP) and Net Acid Generation (NAG) were conducted on the samples.

NAG testing determines the balance between the acid producing and acid consuming components of waste rock samples. NAG results provide the acid rock drainage characteristics based on the complete oxidation of the sample's sulphide content (as well as ferrous iron from siderite dissolution). Acid that is produced by oxidation is consumed by carbonates and/or other acid consuming components of the material. The pH of the solution is measured (NAG pH). The acid remaining after the reaction is titrated with standardized NaOH (sodium hydroxide) to determine the net acid generated.

In summary, the EIS found that all waste rock, other than waste rock from the box-cut, will be treated as PAF.

4.1.2. Stockpiling of Waste Rock

The Federation Mine WREAs (see **Figure 4**) will have an estimated combined capacity of 0.9 MT as described in chapter 4 of the EIS. Drains will surround the WREAs which will capture run-off and report to the Lined Leachate Ponds. Runoff from the WREAs will be captured in leachate storages which are described in **Section 4.1.3**.

The nominated PAF WREA at Federation Mine is approximately 2.4 ha while the NAF WREA is 2.3 ha. The WREA pads will be stripped of topsoil to the appropriate depth as described in Table 7.1 of the *Federation Project – Land and Soil Capability Assessment* (Sustainable Soils Management Pty Ltd, 2021). The WREA pads will have NAF material compacted into the surface to form an impervious layer. Waste rock will be deposited in a “tip to line” manner and dozer pushed to the extent WREA boundaries to maximise storage volume. During the life of the WREAs, Hera Resources will manage water infiltration into the emplacement as required through the traversal of heavy machinery over the WREA to promote compaction, or grading to limit water pooling on the surface. The maximum height of each WREA is approximately 20 m as described in the EIS. While there is no nominated maximum slope, the Mining Manager will be responsible to ensure the WREAs remain safe and stable.

An estimate of waste rock generation to be produced over the first four years of operations are presented in **Table 5**. The numbers presented are indicative during the current stage of mine planning, Hera Resources will update the projection in future reviews of this WRMP as more accurate projections become available.

Table 5: Estimated Waste Rock Generation

Financial Year	FY24	FY25	FY26	FY27
Financial Year Total (t)	106,000	326,000	258,000	59,000
Cumulative Total (t)	265,000 ¹	591,000	849,000	908,000

Note 1: Inclusive of approximately 159,000 tonnes generated during the Exploration & Decline Program

While the waste rock balance for short to medium term is an estimate only, the Rehabilitation Strategy (SLR, 2021) prepared for the EIS calculated an excess of 320,000m³ of material available for the Site's rehabilitation.

During the operation of Hera Mine under MP10_0191, WREAs were in use at Hera Mine. The temporary WREAs are no longer in use at Hera Mine and no waste rock remains on the surface at Hera Mine. No waste rock will be stored at the Hera Mine under this WRMP. Hera Resources will update this WRMP prior to storing any waste rock at the Hera Mine surface.

4.1.3. Management of WREA Leachate Dam and Lined Leachate Pond

The Leachate Dam and Lined Leachate Ponds will capture runoff from the WREAs and will be managed with the following measures:

- The Leachate Dam will have a maximum filling point 870 mm below the top of the dam wall. This comprises an allowance of 170mm for incidental rainfall and 700mm freeboard. The maximum filling point is marked by a level peg.
- The Lined Leachate Ponds will be maintained with 300mm freeboard and will be marked with a level peg.
- Excess water from the Leachate Dam and Lined Leachate Ponds will be pumped to the Process Water Dam to maintain the nominated freeboard level. Inspections will be undertaken after significant rainfall events (>25mm) to ensure adequate freeboard is available.
- Markers will be used to provide a visual indicator of the required freeboard level.
- Leachate Dam and Lined Leachate Ponds are lined with low permeability material.

For additional information on the management of the Lined Leachate Ponds, refer to the WMP.

4.1.4. Management of PAF (Surface and Underground)

The following measures will be implemented to manage PAF material at Site:

- Water infiltration into PAF stockpiles will be minimised through the traversal of heavy machinery over the WREAs.
- If required, the surface of the waste rock stockpiles will be graded to ensure water does not pool on PAF material.
- Monitoring of sulphur oxidation will be undertaken prior to underground emplacement to determine rate of oxidation. The primary method will be via the visual inspection and monitoring of acidity of any runoff or leachate from the WREAs. Results of the oxidisation monitoring will be used to develop oxidisation trigger levels and will be included in a future revision of this WRMP.
- Where possible, Site knowledge of sulfide zones will be utilised to avoid the extraction of PAF material.
- PAF material will be prioritised for the backfilling of stopes to minimise the quantity stockpiled.

Should PAF material be considered too oxidised to place underground a risk assessment will be conducted (as outlined in **Table 4**) to determine the appropriate course of action. The risk assessment will consider the potential impacts of oxidised PAF material on groundwater. Considered mitigation options will include the treatment of the oxidised material with crushed limestone, encapsulation of oxidised material within NAF, and emplacement within the TSF.

4.1.5. Management of NAF (Surface and Underground)

Waste rock material excavated and placed within the WRE will initially be 'paddock dumped'. Once the initial waste rock material has been emplaced, further material will be emplaced using either 'paddock dumping' or 'face tipping' methods. Where appropriate, NAF will be transported directly to other sections of the site for infrastructure establishment. The waste rock may be crushed prior to use in construction activities.

Waste rock not required for surface infrastructure or for rehabilitation purposes will be reclaimed and transported back underground.

4.2. Additional Waste Rock Management Measures

The management of waste rock at Site will be consistent with the approved management practices at Hera Mine. The controls described in **Section 4.1** will form the basis of waste rock management at Site. The key additional management measures are described in the following sections.

Other management measures involving the transportation of waste rock on public roads and the management of potential odour emissions from the WREA will be managed in accordance with the Site's *Traffic Management Plan* and *Air Quality and Greenhouse Gas Management Plan* respectively.

4.2.1. Segregation of NAF and PAF Waste Rock

NAF and PAF material will be segregated within the NAF and PAF WREA at Federation Mine (see **Figure 4**). This will allow the use of NAF in surface construction and rehabilitation activities (e.g. the backfill of the box cut). NAF material that has been identified to be highly sodic or dispersive will not be used in surface rehabilitation or construction, it will instead be incorporated to the final landform in emplacements with short and low slopes to minimise erosion.

Two new Lined Leachate Ponds will capture runoff from the WREAs at Federation Mine. The Lined Leachate Ponds will have a capacity of approximately 2.4ML each and will be lined with clay or other low permeability material that allows a flow of less than $1 \times 10^{-9} \text{m/s}$ through the lining. Monitoring of the Lined Leachate Ponds will be consistent with the practices in place at Hera Mine and are discussed in **Section 5**.

4.2.2. Management of PAF Waste Rock (Surface and Underground)

As with Hera Mine, the primary long-term management of AMD risks from Site's PAF material at Federation Mine is achieved through the emplacement of PAF material underground as backfill. PAF material is to be placed below the final groundwater level (approximately 60m to 80m below the natural surface), where the PAF material will be inundated once mine dewatering ceases therefore reducing oxidisation to negligible levels. The EIS-GA found the emplacement of PAF initially above the water table (prior to groundwater recovery) does pose a minor risk of AMD, however the risk to groundwater during groundwater recovery is considered limited and to be very localised to the placement area (see Section 6.1 of EIS-GA).

PAF stored in the WREA prior to final placement will be visually inspected by the Mine Manager for signs of oxidisation, and runoff to the Lined Leachate Ponds and Leachate Dam will be tested for acidity, by the Environment Superintendent or delegated to appropriately trained and qualified members of the Environment Team or Geology Team. Should inspections or testing indicate significant oxidisation, (trigger levels discussed in **Section 6.1**) a risk assessment will be conducted to determine the most appropriate course of action. Contingency measures for significantly oxidised PAF that will be considered include:

- Remediation of PAF with crushed limestone
- Encapsulating the oxidised PAF material within NAF fill, or
- Emplacement of PAF within the Hera Mine Tailings Storage Facility.

5. PAF WASTE ROCK MONITORING PROGRAM

The surface and ground water monitoring programs at Site allow for the monitoring of potential surface and groundwater impacts from waste rock. Detailed descriptions of surface and groundwater monitoring programs to be implemented by Hera Resources at the Site are described in the WMP.

Hera Resources will monitor and report on measures taken to minimise and manage waste rock. Findings will be reported in the Annual Review (see **Section 8.1**).

5.1. Surface water monitoring

Surface water monitoring for the WREA and potential leachate will be undertaken by the Environment Superintendent (or suitably qualified and experienced delegate) in the following circumstances:

- Monthly under normal circumstances.
- Following heavy rainfall events (>25mm in a 72 hour period) to identify any issue with the proposed management measures. If acid generation within the WREA areas is identified, monitoring of leachate within the Lined Leachate Ponds or Leachate Dam would increase in frequency from monthly to weekly.

Parameters to be monitored for within the Lined Leachate Ponds and Leachate Dam are summarised in **Table 6**.

Table 6: WREA Leachate Monitoring

Type	Parameters	Frequency
Metals	Aluminium, Arsenic, Zinc, Copper, Lead, Silver, Nickel, Boron, Manganese, Cadmium	Monthly (increasing to weekly if leachate detected in leachate storage).
Other	pH, Electrical Conductivity (EC), Total Suspended Solids	AND Following rainfall event that generates runoff

Note: Leachate monitoring is to be conducted for Federation Mine Lined Leachate Ponds and Hera Mine Leachate Dam.

Water within the Lined Leachate Ponds or Leachate Dam will be assessed against the following trigger levels:

- pH outside 6.5-8.5 pH units
- EC above 1000 $\mu\text{S}/\text{cm}$

Water samples outside of this range may indicate oxidisation of waste rock within the WREAs. If surface water testing of the Lined Leachate Ponds indicates low pH water, Hera Resources will:

- Inform the Mining Superintendent of the presence of potentially oxidised waste rock.
- The Environment Superintendent (or delegate) will conduct a visual inspection of the PAF WREA in accordance with **Section 5.1**

Once transferred to the Dewatering Pond, water outside of the trigger levels detailed above will not be used for dust suppression activities onsite.

All water sampling and testing methods will be completed in accordance with the processes described in the WMP.

5.2. Groundwater monitoring

Potential waste rock impacts to groundwater at Federation Mine will be monitored through shallow monitoring bores installed adjacent to the Lined Leachate Ponds (bores LLPOB01 to LLPOB04) and at the Dewatering Pond (bores DWP01 to DWP03) at Federation Mine. The Dewatering Pond will receive transfers from the Lined Leachate Ponds.

Monitoring results at the existing shallow monitoring bores at Hera Mine suggest a low potential for groundwater contamination within the management system. Monitoring of Lined Leachate Ponds groundwater bores will be conducted quarterly at Federation Mine.

A summary of groundwater bore monitoring is presented in **Table 7**.

Table 7: WREA Groundwater Monitoring

Type	Parameters	Location	Frequency
Metals	Aluminium, Arsenic, Zinc, Copper, Lead, Silver, Nickel, Boron, Manganese, Cadmium	Adjacent to leachate storage areas (see EMS).	Quarterly (when water present)
Other	pH, Electrical Conductivity, Total Suspended Solids		

Groundwater levels will also be monitored. Groundwater level triggers for shallow Lined Leachate Ponds monitoring bores and Dewatering Pond monitoring bores at Federation Mine are used to detect influence of the Lined Leachate Ponds and Dewatering Pond on groundwater downgradient of these storages. A stage 1 trigger for groundwater level at the Lined Leachate Ponds and Dewatering Pond monitoring bores is a detection of groundwater in the bore. A stage 2 level trigger for groundwater level at the Lined Leachate Ponds and Dewatering Pond is a rise in groundwater level following the previous quarters detection of groundwater in the bore.

All water sampling and testing methods will be completed in accordance with the processes described in the WMP. **Section 6.1** details the actions Hera Resources will take if groundwater level or quality monitoring indicates a potential seepage from a leachate storage.

5.3. Visual Waste Rock Monitoring

Waste rock at the WREAs will be visually inspected by the Environment Superintendent (or suitably qualified and experienced delegate) on a monthly basis. The visual inspections of the waste rock within the WREAs will look for evidence of staining on waste rock stockpiles. Monitoring records will note the estimated percentage of waste rock within the WREAs that is stained.

Should visual monitoring indicate an increasing trend of oxidisation, a risk assessment will be conducted as described in **Section 4.1.4**.

6. CONTINGENCY PLAN

Unpredicted waste rock impacts may include:

- The significant oxidisation of waste rock within the WREA.
- Surface and groundwater quality impacts from WREA runoff.
- Lined Leachate Ponds or Leachate Dam exceeding design capacity due to high rainfall.

Where unpredicted impacts are identified, mitigation measures would be implemented including:

- Increasing the frequency of monitoring
- Water management activities, and
- Conducting risk assessments to determine the most appropriate action.

Further detail regarding the corrective actions to be undertaken at the Site in the event of unpredicted waste rock related impacts are described in **Section 6.1**.

6.1. Trigger Action Response Plans

The Trigger Action Response Plan (TARP) defines the minimum set of corrective actions that Site must implement in response to unpredicted impacts or abnormal conditions (triggers). The trigger levels are determined based on regulatory requirements, previous monitoring and best practice management. The TARP is displayed in **Table 8**.

Table 8: Trigger Action Response Plan

Key Element	Trigger/Response	Condition Green	Condition Orange	Condition Red
PAF	Trigger	<p>No visible signs of oxidisation on PAF stored within WREA.</p> <p>AND</p> <p>Visual monitoring does not identify any indication of acidic leachate generation (e.g. staining).</p> <p>Surface water monitoring within Lined Leachate Ponds does not identify reduced pH or increased EC.</p>	<p>Visible signs of minor oxidisation on PAF stored within WREA.</p> <p>AND / OR</p> <p>Visual monitoring identifies minor indication of acidic leachate generation (e.g. minor staining).</p> <p>AND / OR</p> <p>Surface water monitoring within Lined Leachate Ponds identifies reduced pH or increased EC.</p>	<p>Visible signs of significant oxidisation on PAF stored within WREA.</p> <p>AND / OR</p> <p>Visual monitoring identifies indication of significant acidic leachate generation (e.g. significant staining).</p> <p>AND / OR</p> <p>Surface water monitoring within Lined Leachate Ponds identifies significantly reduced pH or increased EC.</p>
	Response	No response required	<p>Increase frequency of surface and groundwater sampling to fortnightly.</p> <p>AND</p> <p>Identify waste rock with minor oxidisation for preferential placement underground.</p>	<p>Conduct risk assessment to identify the most appropriate way to manage oxidised PAF material.</p>
Lined Leachate Ponds Capacity	Trigger	<p>Leachate Dam has at least 700mm freeboard.</p> <p>Lined Leachate Ponds have at least 300mm freeboard.</p>	<p>Leachate Dam has less than 700mm freeboard.</p> <p>Lined Leachate Ponds have less than 300mm freeboard.</p>	<p>Overflowing of Lined Leachate Ponds or Leachate Dam.</p>
	Response	No response required.	Transfer water to Dewatering Pond.	Enact incident response protocol.
Leachate Groundwater Level Monitoring	Trigger	No groundwater detected at leachate monitoring bores.	Any groundwater is detected at leachate monitoring bores.	Groundwater level in any leachate monitoring bore has risen from level recorded in previous month.
	Response	No response required.	Increase groundwater level monitoring frequency at leachate bores to monthly.	<ol style="list-style-type: none"> 1. Alert Mine Manager. 2. Provide written non-compliance notification to Planning Secretary in

				<p>accordance with Condition C9 of SSD 24319456 within seven days.</p> <ol style="list-style-type: none"> 3. Investigate if change in groundwater quality is due to seepage from leachate storage area. 4. If investigation indicates groundwater level rise is due to seepage: <ul style="list-style-type: none"> • Provide written incident notification to Planning Secretary in accordance with Condition C8 of SSD 24319456 immediately. • Review requirements of Pollution Incident Response Management Plan (PIRMP). • Report investigation findings to the Planning Secretary via the NSW Major Projects website within thirty days of the incident in Accordance with condition C8 and Appendix 6 of SSD 24319456. • Review WMP and WRMP as per condition C6 of SSD 24319456 within three months.
	Trigger	Groundwater quality is within typical range of historical average (see WMP).	Groundwater quality testing at leachate monitoring bores indicates a rise in EC, cyanide, or specific metals over a three month period.	Groundwater quality testing at leachate monitoring bores indicates a rise in EC, cyanide, or specific metals over a six month period (two monitoring events).
Leachate Ground Water Quality Monitoring	Response	No response required.	<ol style="list-style-type: none"> 1. Alert Mine Manager. 2. Provide written non-compliance notification to Planning Secretary in accordance with Condition C9 of SSD 24319456 within seven days. 3. Investigate if change in groundwater quality is due to seepage from leachate storage area. 4. If investigation indicates that change in groundwater quality is due to seepage of leachate: <ul style="list-style-type: none"> • Provide written incident notification to Planning Secretary in accordance with Condition C8 of SSD 24319456 immediately. • Review requirements of Pollution Incident Response Management Plan (PIRMP). • Report investigation findings to the Planning Secretary via the NSW Major Projects website within thirty days of the incident in Accordance with condition C8 and Appendix 6 of SSD 24319456. 	

-
- Review WMP and WRMP as per condition C6 of SSD 24319456 within three months.
-

6.2. Adaptive Management

Potential waste rock related risks relevant to the Site have been identified through the EIS process, environmental monitoring, and learnings from previous operations at Hera Mine. Risk mitigations have been incorporated into management practices in **Section 4**. Unpredicted impacts are addressed as far as practicable in **Section 6.1**.

Any potential waste rock related risks that are identified during the operation of the Site will be addressed in future updates of this WRMP.

7. INCIDENT AND COMPLAINT MANAGEMENT

7.1. Incident and Non-compliance Protocol

Hera Resources will manage any waste rock related incident or non-compliance at Site in accordance with the incident and non-compliance protocols described in the Environmental Management Strategy (EMS). In summary Hera Resources will, at the earliest opportunity:

- Take all reasonable and feasible measures to ensure that the non-compliance ceases and does not recur
- Consider all reasonable and feasible options for remediation (where relevant)
- Implement remediation measures as required, and
- Submit a report within seven days of becoming aware of the non-compliance in accordance with condition C9 of the consent.

The written notification of an incident, to be provided within seven days of the incident, will be provided to the Secretary and will:

- Identify the development and application number
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident)
- Identify how the incident was detected
- Identify when the Applicant became aware of the incident
- Identify any actual or potential non-compliance with conditions of consent
- Describe what immediate steps were taken in relation to the incident
- Identify further action(s) that will be taken in relation to the incident; and
- Identify a project contact for further communication regarding the incident.

A detailed report will be submitted within 30 days of the incident (or as otherwise agreed by the Secretary). See **Section 8.2** for details.

7.2. Complaints Management

The EMS includes a detailed complaints management procedure. This sub-section records the procedures that would be implemented following the receipt of a waste rock related complaint.

Complaints can be directed to Hera Resources via phone or email. These details are presented **Table 9**.

Table 9: Contact Details for Complaints

Communication Method	Details	Availability
Email	complaints@aureliametals.com.au	24/7
Telephone	1300 016 240	24/7

Following receipt of any waste rock related complaint, Hera Resources would implement the following procedure:

1. Any complaints submitted through the complaints mechanism or at community forums (e.g. CCC) are escalated to the Environment Superintendent and added to the complaints register. The Environment Superintendent will determine, and add to the register, the following details:
 - Details of the complaint (date, time, details, complainants contact details).
 - Which relevant activities occurred during the complaint period to investigate the source of the complaint.

- Whether the complaint was a result of non-compliant activities or an incident as defined in the consent.
- What corrective or preventative actions are required to avoid the complaint recurring.
- When corrective or preventative actions need to take place.

Hera Resources will notify the complainant that the complaint was received and is being investigated within 2 days of receiving the complaint.

2. If relevant, monitoring data for the period will be reviewed to assist in determining the source of the complaint. The complainant will then be contacted to discuss and attempt to resolve the complaint.
3. In the event that the complaint is resolved via Step 2, no further action would be taken. If not resolved, then supplementary monitoring may be undertaken, if relevant to the complaint, within one month of the conclusion of Step 2 in accordance with the procedures identified in **Section 5**.
4. Should the review of the monitoring data indicate that no non-compliance of the relevant criteria was identified, this will be communicated to the complainant. If monitoring data indicates that a non-compliance or incident has occurred, it will be communicated to the complainant and will be managed and reported in accordance with the protocol described in **Section 8**.
5. Corrective and preventative actions identified as a result of a complaint will be communicated to all relevant personnel through toolbox meetings and/or company memorandums. The relevant EMP will be reviewed and updated to reflect the findings of the complaint investigation if required.

The complaints register will be maintained by Hera Resources for the life of the Site and updated monthly. A record of any complaint will be kept for at least the life of the Site and the record will be produced to any authorised officer if requested, as well as made available on the Aurelia Metals website. A summary of annual complaints received will be provided in the Annual Review and made available on the Aurelia website. The complaints register will include any response from the complainant.

8. REPORTING

8.1. Annual Reporting

Hera Resources will prepare an Annual Review each year in accordance with condition C10, which states:

By the end of September each year after the date of physical commencement of development under this consent, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must:

- (a) describe the development (including any rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;*
- (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, including a comparison of these results against the:

 - (i) relevant statutory requirements, limits or performance measures/criteria;*
 - (ii) requirements of any plan or program required under this consent;*
 - (iii) monitoring results of previous years; and*
 - (iv) relevant predictions in the document/s listed in condition A2(c);**
- (c) identify any non-compliance or incident which occurred in the previous financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;*
- (d) evaluate and report on compliance with the performance measures, criteria and operating conditions of this consent;*
- (e) identify any trends in the monitoring data over the life of the development;*
- (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and*
- (g) describe what measures will be implemented over the next financial year to improve the environmental performance of the development.*

Copies of the Annual Review will be submitted to Cobar Shire Council and made available to the Community Consultative Committee, or any interested person upon request, in accordance with condition C11.

Hera Resources must also submit an Annual Return in accordance with condition R1.1 of EPL 20179 which states:

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- 1. a Statement of Compliance;*
- 2. a Monitoring and Complaints Summary;*
- 3. a Statement of Compliance – Licence Conditions;*
- 4. a Statement of Compliance -Load based Fee;*
- 5. a Statement of Compliance -Requirement to Prepare Pollution Incident Response Management Plan;*
- 6. a Statement of Compliance – Requirements to Publish Pollution Monitoring Data; and*
- 7. a Statement of Compliance – Environmental Management Systems and Practices.*

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

The Annual Review will be made available on the Aurelia Metals website.

8.2. Incident Reporting

An incident is defined in the consent as:

An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

Hera Resources will report any incidents in accordance with the protocol described in the EMS and condition C8 and Appendix 6 of SSD 24319456. Condition C8 states:

The Planning Secretary must be notified in writing via the Major Projects website immediately after the Applicant becomes aware of an incident. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix 6.

The incident report to be prepared in accordance with the requirements of Appendix 6 of the Consent, and provided to the Secretary within 30 days of the incident (or as otherwise agreed to by the Secretary), will include:

- a summary of the incident
- outcomes of an incident investigation, including identification
- details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence, and
- details of any communication with other stakeholders regarding the incident.

8.3. Non-Compliance Reporting

A non-compliance is defined in the consent as:

An occurrence, set of circumstances or development that is a breach of this consent.

Hera Resources will report any non-compliances in accordance with the protocol described in the EMS and condition C9 of SSD 24319456. Condition C9 states:

The Planning Secretary must be notified in writing via the Major Projects website within seven days after the Applicant becomes aware of any non-compliance. A non-compliance notification must identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Note: *A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*

Non-compliance notification will be provided to the Planning Secretary in writing in the Major Projects Portal within seven days after Hera Resources becomes aware of the non-compliance. It should be noted that a non-compliance already notified as an incident does not need to also be notified as a non-compliance. Further detail regarding the requirements of written notifications are provided in **Section 8.2**.

8.4. Independent Environmental Audit

Hera Resources will commission and provision for an Independent Environmental Audit in accordance with conditions C12 and C13 which state:

C12 Within one year of the date of physical commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must:

- (a) be prepared in accordance with the Independent Audit Post Approval Requirements (NSW Government 2020); and*
- (b) be submitted, to the satisfaction of the Planning Secretary, within two months of undertaking the independent audit site inspection, unless otherwise agreed by the Planning Secretary.*

and;

C13 In accordance with the specific requirements of the Independent Audit Post Approval Requirements (NSW Government 2020), the Applicant must:

- (a) review and respond to each Independent Audit Report prepared under Condition C12 of this consent;*
- (b) submit a response to the Planning Secretary and any other NSW agency that requests it, together with a timetable for the implementation of the recommendations of the Independent Audit Report;*
- (c) implement the recommendations to the satisfaction of the Planning Secretary; and*

make each Independent Audit Report and response to it publicly available no later than 60 days after submission to the Planning Secretary.

8.5. Access to Information

Hera Resources will make available the following information in accordance with condition C15 of the consent:

C15 Within three months of the date of physical commencement of development under this consent, until the completion of all rehabilitation required under this consent, the Applicant must:

- (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:*
 - (i) the document/s listed in condition A2(c);*
 - (ii) all current statutory approvals for the development;*
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;*
 - (iv) minutes of CCC meetings;*
 - (v) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent;*
 - (vi) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;*
 - (vii) a summary of the current phase and progress of the development;*
 - (viii) contact details to enquire about the development or to make a complaint;*
 - (ix) a complaints register, updated monthly;*
 - (x) the Annual Reviews of the development;*
 - (xi) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; and*
 - (xii) any other matter required by the Planning Secretary; and*

keep such information up to date, to the satisfaction of the Planning Secretary.

Monitoring required by SSD 24319456 and EPL 20179 will be reported in the Annual Review and on the Aurelia website.

Other methods Hera Resources will use to communicate with the public (providing and receiving information) include, where appropriate:

- Maintenance of a community hotline (phone number – 1800 437 264) or email (hera.community@aureliametals.com.au) where community stakeholders can seek information.
- A Site specific page maintained on Aurelia's website providing monthly updates.
- Mass email notifications will be dispatched using Hera Resource's contact database where necessary.
- Media releases will be prepared and distributed by Aurelia or Hera Resources for Site announcements.
- Surveys will be used where appropriate to gather feedback and inform Site planning and operations.
- Presentation of information at community/stakeholder forums including the Community Consultative Committee (CCC).

9. ROLES AND RESPONSIBILITIES

The roles and responsibilities for Hera Resources personnel in relation to this WRMP are listed in **Table 10**.

Table 10: Roles and Responsibilities

Position	Accountable Task
General Manager	<ul style="list-style-type: none"> • Ensure the resources are available for the implementation of this management plan. • Be accountable for the overall environmental performance of the operation, including the outcomes of this management plan. • Negotiation with relevant landowners to achieve acceptable outcomes for issues that arise.
Environment Superintendent	<ul style="list-style-type: none"> • Monitor environmental incidents and act upon any nonconformities. • Record and file all monitoring results. • Receive and investigate incidents relating to waste rock. • Conduct visual inspections of PAF waste rock.
Production Manager	<ul style="list-style-type: none"> • Management of waste rock. • Management and maintenance of WREA • Storage of PAF/NAF within the WREA. • Management of Pastefill Plant.
Geology Superintendent	<ul style="list-style-type: none"> • Visual determination of classification of waste rock.
Mining Manager	<ul style="list-style-type: none"> • Ensure stockpiled waste rock remains safe and stable.

10. TRAINING AND AWARENESS

All personnel shall undergo waste rock management awareness training through the induction and re-induction process. Waste rock management shall be a component of the competency based site induction program for relevant personnel. Hera Resource geologists will be competent in the identification of sulphide zones within the waste material.

11. REVIEW AND IMPROVEMENT

This WRMP will be reviewed and revised as necessary in accordance with the requirements of Condition C6 of SSD 24319456 which states that reviews must be conducted:

Within three months of:

- a) the submission of an incident report under condition C7;*
- b) the submission of an Annual Review under condition C9;*
- c) the submission of an Independent Environmental Audit under condition C11; or*
- d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise);*
- e) notification of a change in development phase under condition A5; or*
- f) a direction of the Secretary under condition A3 of Schedule 2*

the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.

Following a review of the WRMP required by C6, or following a review to improve the environmental performance of the Site, Hera Resources will provide the revised document to the Planning Secretary within six weeks of the review in accordance with condition C7, which states:

If necessary, to either improve the environmental performance of the development or cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

The WRMP will be revised to the satisfaction of the Planning Secretary.

12. REFERENCES

- Terrenus Earth Sciences (2021) *Geochemical Assessment of Potential Waste Rock and Tailings – Federation Project*
- GHD (2023) *Federation Mine and Hera Mine – Water Management Plan*, prepared for Aurelia Metals Ltd
- TTPP (2023) *Federation Mine and Hera Mine – Traffic Management Plan*, prepared for Aurelia Metals Ltd
- Todoroski Air Sciences (2023) *Federation Mine and Hera Mine – Air Quality and Greenhouse Gas Management Plan*, prepared for Aurelia Metals Ltd

Appendix A - Consultation

Our ref: OUT23/12210

Richard Oldham

Email: richard.oldham@aureliametals.com.au

7 August 2023

Subject: **Federation Project – Waste Rock Management Plan (SSD-24319456-PA-2)**

Dear Richard

I refer to your request for advice sent on 03 August 2023 to the Department of Planning and Environment (DPE) Water about the above matter.

The Department of Planning and Environment- Water has no comments on this matter.

Should you have any further queries in relation to this submission please do not hesitate to contact DPE Water Assessments at water.assessments@dpie.nsw.gov.au

Yours sincerely,



Panayiotis Panaretos

Project Officer, Assessments, Knowledge Division

Department of Planning and Environment: Water



DOC23/768675

20 September 2023

Mr Richard Oldham
Approvals Specialist
Aurelia Metals Ltd
Level 17, 144 Edward Street
Brisbane QLD 4001

By email: richard.oldham@aureliametals.com.au

Dear Mr Oldham

Hera Resources Hazardous Materials Management Plan, Waste Rock Management Plan and Water Management Plan for Federation and Hera Mine – Post Approval Consultation SSD-24319456-PA-1

I refer to your Hazardous Materials Management Plan, Waste Rock Management Plan and Water Management Plan that was referred to the Environment Protection Authority (EPA) on 02 August 2023 seeking the EPA's consultation in accordance with condition B82 of development consent SSD 24319456.

As part of the regulatory process, the EPA encourage the preparation of strategies, programs and plans, as useful tools for industry to ensure they meet their statutory obligations. As a regulatory authority, the EPA does not review or comment on these plans in terms of adequacy unless there is a specific reason to do so. The EPA does not endorse the details of these plans. These strategies, programs and plans are for the benefit of the Company.

Accordingly, the EPA will not be providing further comment to this request.

If you have any questions about this request, please contact Steve Ryder on (02) 6881 4651 or by email to info@epa.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'S. Lund', written over a light blue horizontal line.

Simon Lund
A/Unit Head
Regulatory Operations
NSW Environment Protection Authority

Phone 131 555
Phone 02 9995 5555
(from outside NSW)

TTY 133 677, then
ask for 131 155

Locked Bag 5022
PARRAMATTA
NSW 2124

6&8 Parramatta
Square 10 Darcy
Street
PARRAMATTA NSW
2150

info@epa.nsw.gov.au
www.epa.nsw.gov.au
ABN 43 692 285 758

Monday 4th September 2023

Richard Oldham
Aurelia Metals
info@reachenvironmental.com.au

Via: Major Projects Portal

Dear Richard,

I refer to your request of 28 August 2023 for advice regarding Federation Mine Water Management Plan (SSD-24319456) and Waste Rock Management Plan (SSD-24329456-PA1). The Resources Regulator has reviewed the request.

The Resources Regulator has reviewed the Waste Rock Management plan and Water Management Plan associated with the Federation Mine.

Based on the review, the Regulator has no specific comments. However, it is the expectation that any matters relating to rehabilitation are documented within the Rehabilitation Management Plan as required under Schedule 8A of the Mining Regulation 2016.

CONTACT

Should you require any further information or clarification, please contact the Regulator on 1300 814 609 (Press Option 2 Press Option 5) or email nswresourcesregulator@service-now.com.

Yours sincerely,



Matthew Newton
Principal Inspector –Environment and Rehabilitation
Resources Regulator

From: [Richard Oldham](#)
To: [Chris Jones](#); [Jordan Murray](#)
Cc: [Jonathon Thompson](#)
Subject: FW: Federation Project Development Consent and Management Plans
Date: Tuesday, 25 July 2023 1:20:03 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

Further confirmation from CSC below.

Richard Oldham | Approvals Specialist
Aurelia Metals Ltd
M 0415331592


From: Garry Ryman <garry.ryman@cobar.nsw.gov.au>
Sent: Tuesday, July 25, 2023 1:09 PM
To: Richard Oldham <richard.oldham@aureliametals.com.au>
Cc: mail CSC <mail@cobar.nsw.gov.au>; Kane Kreeck <kane.kreeck@cobar.nsw.gov.au>;
Jonathon Thompson <Jonathon.Thompson@aureliametals.com.au>; Mark Williams
<mark.williams@aureliametals.com.au>
Subject: RE: Federation Project Development Consent and Management Plans

Hi Richard,

If needed, please feel free to use these emails to demonstrate consultation with Cobar Shire Council in respect of the subject Plans.

Regards
Garry

 **Garry Ryman**
Director of Planning & Environmental Services
Cobar Shire Council | 36 Linsley Street (PO Box 223) | COBAR NSW 2835
P: (02) 6836 5838 | **M:** 0408 695 026
E: garry.ryman@cobar.nsw.gov.au | **W:** www.cobar.nsw.gov.au


IMPORTANT NOTICE: This e-mail and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Cobar Shire Council is not responsible for any unauthorised alterations to this e-mail or attachment to it. Views expressed in this message are those of the individual sender and are not necessarily the views of the Cobar Shire Council. If you receive this e-mail in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this e-mail if you are not the intended recipient. Before printing, please consider the environment.

From: Richard Oldham <richard.oldham@aureliametals.com.au>
Sent: Tuesday, July 25, 2023 12:29 PM
To: Garry Ryman <garry.ryman@cobar.nsw.gov.au>
Cc: mail CSC <mail@cobar.nsw.gov.au>; Kane Kreeck <kane.kreeck@cobar.nsw.gov.au>;
Jonathon Thompson <jonathon.thompson@aureliametals.com.au>; Mark Williams

<mark.williams@aureliametals.com.au>

Subject: RE: Federation Project Development Consent and Management Plans

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Garry

Thanks for the response. I can confirm that water and waste rock management, as described in the Water Management Plan and Waste Rock Management Plan, is not predicted to materially impact on Council's infrastructure.

The management plans will be submitted to DPE for their approval, which they will only approve if they are satisfied that the proposed plans are in substantial accordance with the development consent.

Regards
Richard

Richard Oldham | Approvals Specialist
Aurelia Metals Ltd
M 0415331592

From: Garry Ryman <garry.ryman@cobar.nsw.gov.au>

Sent: Monday, July 24, 2023 9:23 AM

To: Richard Oldham <richard.oldham@aureliametals.com.au>

Cc: mail CSC <mail@cobar.nsw.gov.au>; Kane Kreeck <kane.kreeck@cobar.nsw.gov.au>

Subject: RE: Federation Project Development Consent and Management Plans

Hi Richard,

I refer to below request.

If proposed water management does not materially impact on Council's off site infrastructure for example a significant concentrated discharge of clean water to Council's road drainage system (or similar impact) and the potential impacts are only site related then the need for consultation is unlikely.

If you are satisfied that there are no off site impacts which may impact Council infrastructure and the consent authority is satisfied that the proposed Plan is in substantial accordance with the development consent Council does not object to the Plan proceeding without referral.

If you determine a need to seek comments from Council please submit via mail@cobar.nsw.gov.au .

If you have any questions please email or give me a call. My mobile telephone number is 0408

695 026.

Regards
Garry



Garry Ryman

Director of Planning & Environmental Services

Cobar Shire Council | 36 Linsley Street (PO Box 223) | COBAR NSW 2835

P: (02) 6836 5838 | **M:** 0408 695 026

E: garry.ryman@cobar.nsw.gov.au | **W:** www.cobar.nsw.gov.au



IMPORTANT NOTICE: This e-mail and any attachment to it are intended only to be read or used by the named addressee. It is confidential and may contain legally privileged information. No confidentiality or privilege is waived or lost by any mistaken transmission to you. Cobar Shire Council is not responsible for any unauthorised alterations to this e-mail or attachment to it. Views expressed in this message are those of the individual sender and are not necessarily the views of the Cobar Shire Council. If you receive this e-mail in error, please immediately delete it from your system and notify the sender. You must not disclose, copy or use any part of this e-mail if you are not the intended recipient. Before printing, please consider the environment.

From: Richard Oldham <richard.oldham@aureliametals.com.au>

Sent: Friday, July 14, 2023 2:53 PM

To: Garry Ryman <garry.ryman@cobar.nsw.gov.au>

Cc: Jonathon Thompson <jonathon.thompson@aureliametals.com.au>

Subject: Federation Project Development Consent and Management Plans

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Garry

Hera Resources is a wholly owned subsidiary of Aurelia Metals Ltd. Hera Resources' Federation Project was approved by DPE on 02/03/2023, with consent conditions as per attached, with Project details available at: <https://www.planningportal.nsw.gov.au/major-projects/projects/federation-project>.

The conditions of consent (B43) require consultation with the Council on a Water Management Plan, which incorporates a Waste Rock Management Plan. Aurelia proposes to submit these management plans via the major projects Portal; however we are also seeking to engage directly with the Council if this is Council's preference to using the Portal.

If Council is interested, we propose a short presentation to provide some context for the management plans and to provide information about key aspects of the proposed management. Alternatively, if Council is not resourced to review these management plans, please let me know.

Regards
Richard

Richard Oldham | Approvals Specialist

Aurelia Metals Ltd

M 0415331592