

HAZARDOUS MATERIALS MANAGEMENT PLAN

HERA MINE AND FEDERATION MINE

15/05/2025



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Appendix

Appendix A – Consultation

Version	Date	Description	Author
V0.1	28/08/2023	Draft for Consultation	IEMA and Aurelia Metals
V0.2	27/09/2023	Final for DPE Submission	IEMA and Aurelia Metals
V0.3	28/02/2024	Final for Re-Submission	IEMA and Aurelia Metals
V0.4	15/04/2024	Final for Re-Submission	IEMA and Aurelia Metals
V1.0	15/05/2025	Update to reflect changes from consent Modification 2	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 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 Mine site in 2019 with subsequent drilling operations identifying a substantial gold-lead-zinc-copper-silver mineral resource.

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*.

Development consent ('the consent') for the Project (SSD 24319456) was granted on 2 March 2023 and has since been modified twice. Modification 1 was approved on 27 November 2023 regarding changes to biodiversity offset staging.

Modification 2 was approved on 27 March 2025 to allow options for:

- haulage between 7am and 10pm of up to 600ktpa of ore to Peak Gold Mine (PMG) for processing, throughout the life of mine;
- reclaim of tailings from the existing Hera Mine Tailings Storage Facility (TSF) for paste backfill at Federation Mine; and
- minor rearrangement of infrastructure at Federation Mine within the approved disturbance area, inclusive of new water tank.

The consent required 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 Hera Gold Mine consent was surrendered on 17 March 2025. 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'.

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	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.
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 and to Peak Mine via Priory Tank Road and Kidman Way. Tailings will be transported from Hera Mine to Federation Mine via Burthong Road. 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. At the peak of mining, concentrate, ore, and tailings transport is estimated to be an average of 61 vehicle trips (one-way movements) per day.

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 Leach 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 Leach 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>
	<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).

Ore from Federation Mine will be trucked to the Peak Mine during the first four years of operations. 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 the Site is shown in **Figure 1** and a general site layout is in **Figure 2**. Detailed layouts of Hera Mine and Federation Mine are shown in **Figure 3** and **Figure 4** respectively.

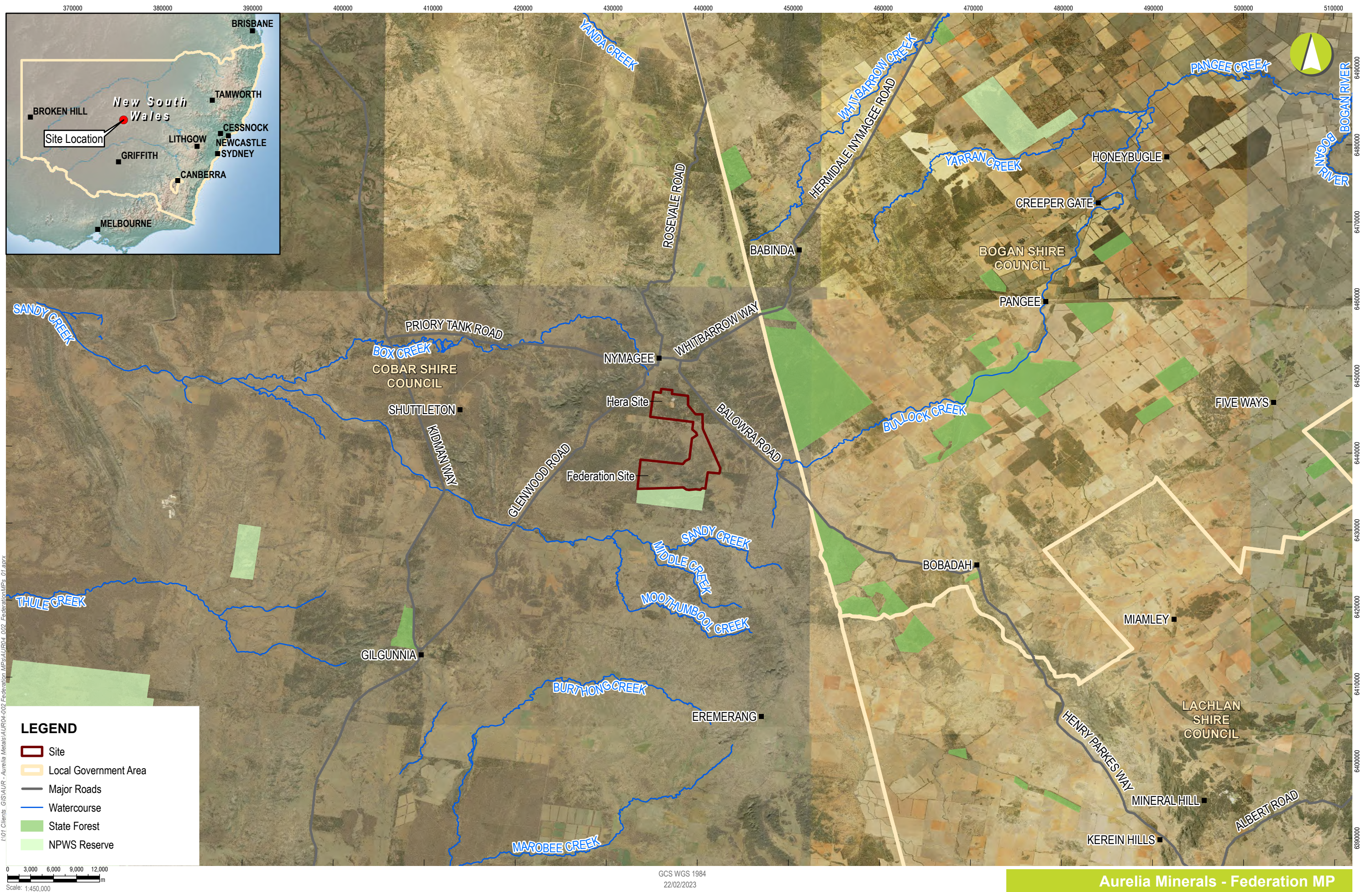
1.2. Purpose and Scope

This Hazardous Materials Management Plan (HMMP) has been prepared in accordance with Condition B82 of SSD 24319456 to manage the Hazardous Materials impacts of the Site.

The existing Hera Mine infrastructure will be utilised to store and manage hazardous materials. Generally, the management, storage, and use of hazardous materials will continue to be carried out in accordance with the management measures described in the Hera Mine HMMP approved under consent PA10_0191 and now described in this document.

The key new activities to be introduced to Site as part of the Federation Project revolve around the delivery, storage, and use of explosives and fuel as described in **Section 4.2**.

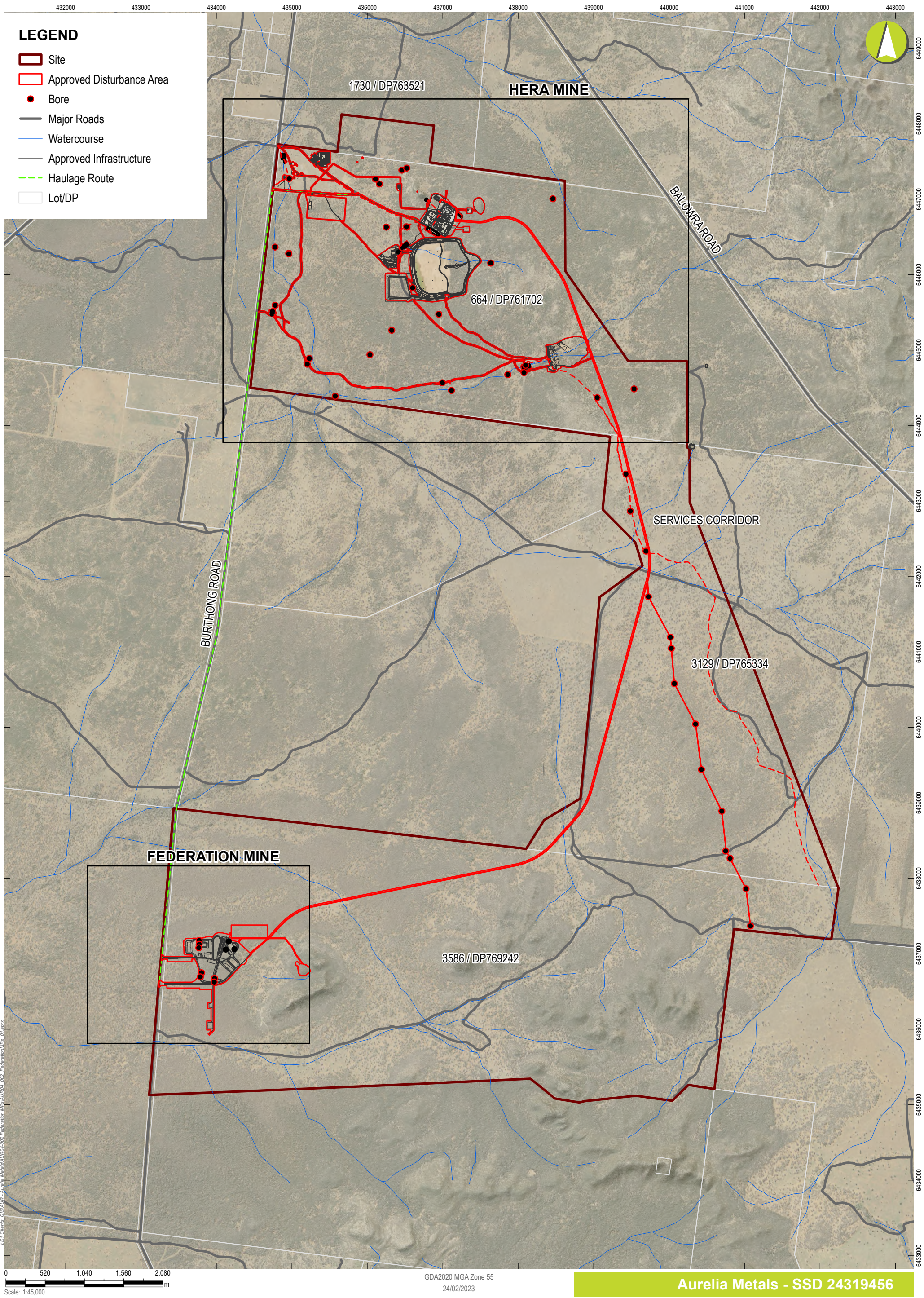
All management activities at Site will be carried out generally in accordance with the EIS, the conditions of the consent, layout, all written directions from the Planning Secretary or other relevant authorities, and the approved development layout.

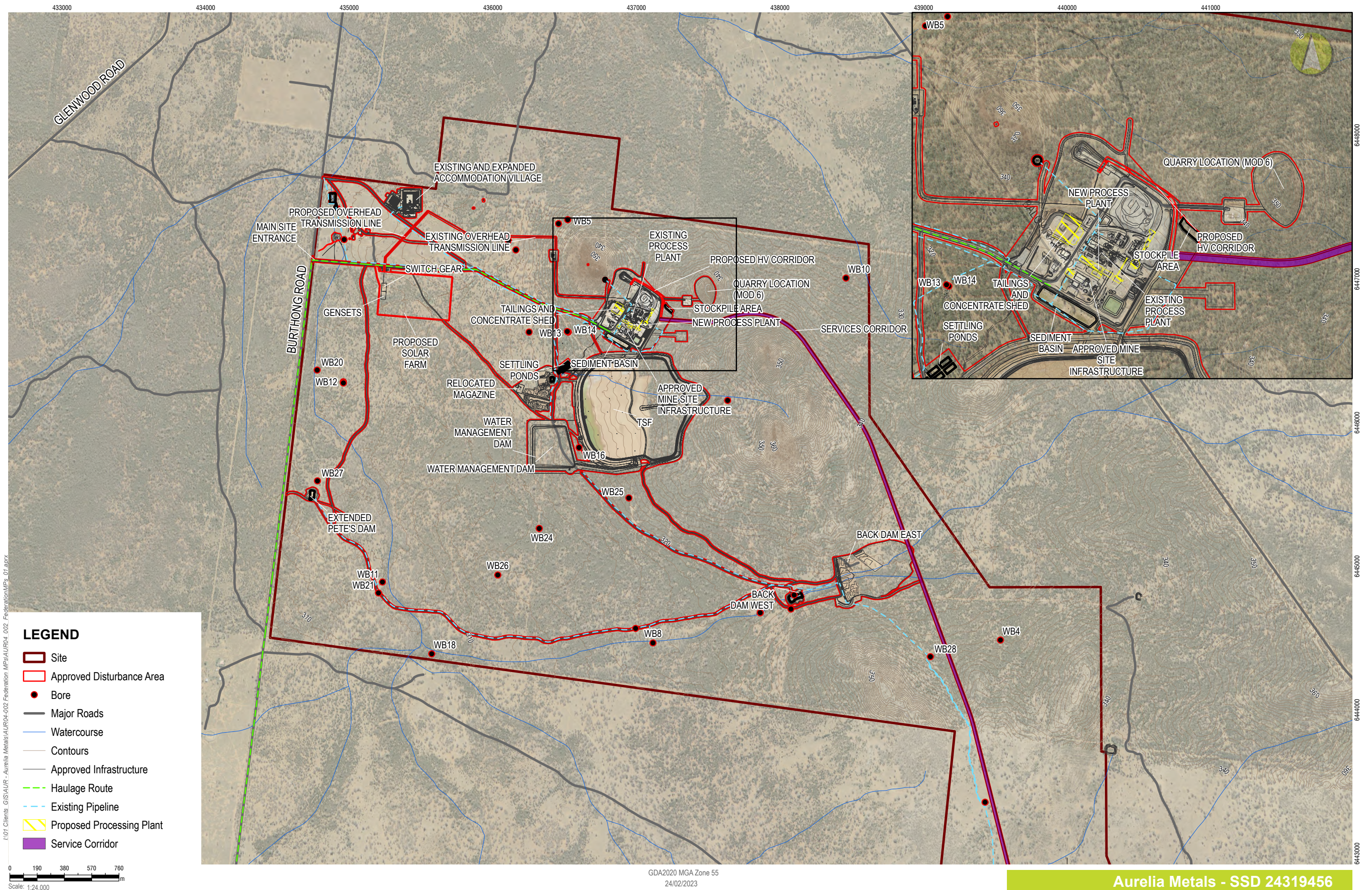


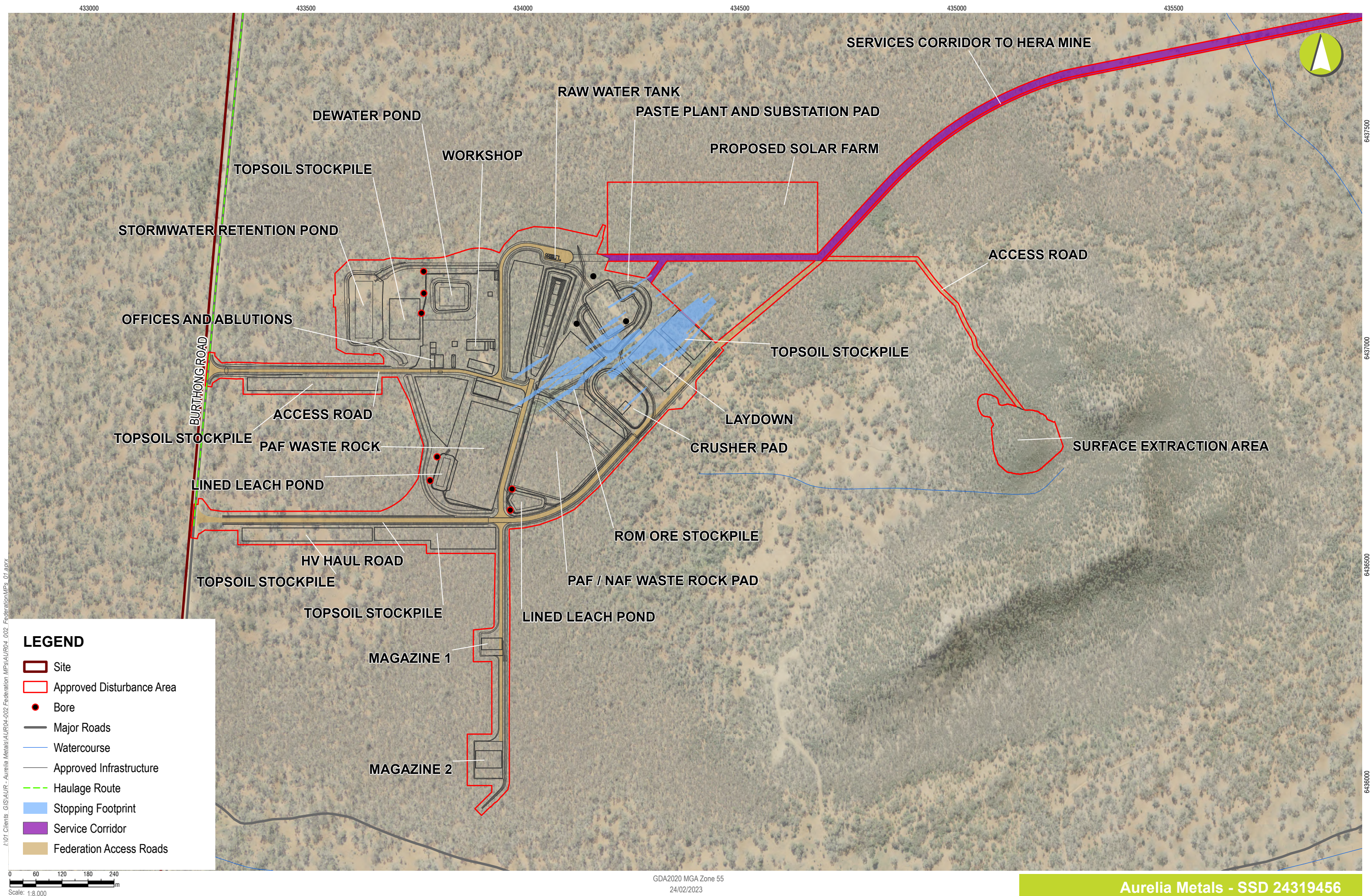
Aurelia Minerals - Federation MP

Regional Locality

FIGURE 1







2. LEGAL AND OTHER REQUIREMENTS

2.1. SSD 24319456

SSD 24319456 stipulates the required criteria that the construction and operational activities at the Site must comply with and sets out the core requirements of this HMMP. Relevant conditions associated with this approval and where they have been addressed in this document are reproduced in **Table 2**. Hera Resources will comply with the conditions in **Table 2**.

Table 2: Relevant SSD 24319456 Conditions

Condition No.	Condition	Where Addressed
TERMS OF CONSENT		
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
HAZARDOUS MATERIALS MANAGEMENT PLAN		
B82	The Applicant must prepare a Hazardous Materials Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:	Section 2.4
	(a) be prepared in consultation with TfNSW, EPA, DPE Water, SafeWork NSW and Resources Regulator;	
	(b) be consistent with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold;	Section 4.1.2
	(c) describe the measures that would be implemented to:	
	(i) ensure sodium cyanide and other toxic chemicals are stored and handled in accordance with <i>AS/NZS 4452:1997 – The Storage and Handling of Toxic Substances</i> ; and	
	(ii) ensure the transportation of hazardous materials to or from the site is undertaken in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 11 – Route Selection</i> and the <i>Australian Code for the Transport of Dangerous Goods by Road and Rail</i> ;	Section 4 Section 6
	(iii) detail the emergency procedures for the development consistent with the Department's <i>Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning</i> .	
B83	The Applicant must not commence mining operations until the Hazardous Materials Management Plan has been approved by the Planning Secretary.	Noted
B84	The Applicant must implement the Hazardous Materials Management Plan as approved by the Planning Secretary.	Noted
Management Plan Requirements		
C5	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);	
	(ii) any relevant limits or performance measures and criteria; and	Section 4
	(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;	
	(c) any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	This document
	(d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 5 Section 8

Condition No.	Condition	Where Addressed
	(e) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to paragraph (d);	Section 5
	(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
	(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: (i) incident, non-compliance or exceedance of any impact assessment criterion or performance measure; (ii) complaint; or (iii) failure to comply with other statutory requirements;	Section 8
	(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	Section 9
	(j) a protocol for periodic review of the plan.	Section 11
	Note: The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	N/A

2.2. Environment Protection Licence

Relevant conditions of EPL 20179 to this HMMP and where they are addressed in this plan are provided in **Table 3**.

Table 3: Relevant EPL Conditions

Condition No.	Condition	Where Addressed
0.4 Other Operating Conditions		
04.1 Bunding Requirements		
04.1	All above ground storage facilities containing flammable and combustible liquids must be bunded in accordance with Australian Standard AS 1940-2004. Sodium Cyanide and other Toxic Chemicals must be stored in accordance with the requirements of AS/NZS 4452 - <i>The Storage and Handling of Toxic Substances</i> .	Section 4

2.3. International Cyanide Management Code

As required by Condition B82(b) this HMMP has been prepared to be consistent with *The International Cyanide Management Code* (ICMC). The ICMC is a global voluntary initiative aimed at promoting responsible management of cyanide used in gold and silver mining operations. The ICMC provides comprehensive guidance and best practices to ensure the safe handling, transport, and use of cyanide.

The ICMC was developed by a multi-stakeholder group consisting of representatives from industry, governments, non-governmental organizations, and other relevant stakeholders. It is based on principles such as transparency, accountability, and continuous improvement, and is intended to minimize the risks associated with cyanide use while protecting human health and the environment.

The ICMC covers all aspects of cyanide management, including the design, construction, and operation of cyanide facilities, the handling and transport of cyanide, and the training of personnel involved in its use. It also includes requirements for emergency response planning, risk assessment, and monitoring of environmental and health impacts.

By adhering to the International Cyanide Management Code, mining companies can demonstrate their commitment to responsible hazardous materials management and contribute to sustainable development in the mining industry. The ICMC provides a framework for continuous improvement and collaboration among stakeholders, and it serves as an important tool for promoting responsible mining practices worldwide.

2.4. Consultation

This management plan was prepared in consultation with Transport for NSW (TfNSW), Environment Protection Authority (EPA), DPE Water, SafeWork NSW, and the Resources Regulator (RR). Detailed consultation was conducted with these stakeholders for the MOD 2 EIS. As such, consultation was not required for the administrative updates to this plan. This approach was confirmed by DPHI in their letter dated 15 April 2025 and attached in **Appendix A**. The consultation detailed in **Table 4** below was completed as part of the previous version of this management plan.

Table 4: Consultation

Authority	Comments	Where Addressed /Comment
TfNSW	<p>2022 Comments (MP 10_00191)</p> <p>TfNSW responded to Hera Mine's MOD6 request for consultation on 22/06/2022.</p> <p><i>TfNSW requests this further information be provided prior to concluding consultation:</i></p> <ul style="list-style-type: none"> <i>The main plan body and the risk assessment at Appendix 4 do not appear to expressly include a risk assessment for haulage of hazardous materials by public roads as part of Hera Mine operations, including cyanide compounds, explosives and other hazardous supplies. Risk assessment should include assessment of haulage of hazardous materials by public roads. As the risk of a vehicle crash is not negligible, emergency response to remote roadside locations should be considered.</i> <i>HMMP Sections 8.8 and 8.10 state that "... transporters will be required to implement appropriate emergency response plans and capabilities and other measures..." All materials transported (as well as cyanide) should be covered by transport and emergency response plans. If there are any gaps in the scope of the suppliers' sub-plans relative to the consent holder's overall responsibilities, these should be addressed within the HMMP. For example, the assessment may recommend road signage or delineation improvements (in consultation with the relevant Council, and TfNSW if in relation to a State Road).</i> <p><i>It is noted the plan does not reference Federation Mine, which would use Hera Mine processing and haulage operations. It is understood a future revision would be required prior to Federation Mine operations commencing, if that MP application is approved.</i></p>	<p>Section 4.1</p> <p>Section 4.2</p> <p>This management plan addresses the Site, which includes Federation Mine.</p>
	<p>2023 Comments (SSD 24319456)</p> <p>TfNSW responded on 9/08/2023 with two comments, as follows:</p> <p><i>TfNSW offers the following comments which should be considered in the plan or subordinate plans:</i></p> <ul style="list-style-type: none"> <i>Development specific HMMP that incorporates all requirements approved under MP10_0191.</i> <i>Comments outlined in TfNSW response dated 29/6/2022 for the existing Hera Mine. These are attached for your information.</i> 	<p>This management plan has been prepared to the requirements of the Site as described in the EIS and subsequent reports, and SSD 24319456, including the Hera Mine processing and haulage operations.</p>
	<p>EPA responded on 20/09/2023 and declined to comment.</p>	<p>No comment provided.</p>
DPE Water	<p>DPE Water responded on 7/08/2023 with no comments.</p>	<p>No comment provided.</p>
SafeWork NSW	<p>SafeWork NSW responded 16/08/2023 with no comments.</p>	<p>No comment provided.</p>
RR	<p>RR responded on 4/09/2023 with no comments.</p>	<p>No comment provided.</p>

3. BASELINE ENVIRONMENT

Sensitive receptors are in the vicinity of the Hera Mine site and along haul routes between Hera Mine and Federation Mine. The closest sensitive receptors to Hera Mine are receptors R3 and R2/R1, which are located approximately 2.5 km north west of the mine infrastructure area and 3.0 – 3.5 km south west of the mine infrastructure area, respectively.

Hera Mine has existing infrastructure to manage the storage and handling of hazardous materials including the:

- Reagent and chemical storage building
- Tailings pipeline and decant water return
- Flotation tanks
- Tailings Storage Facility (TSF)
- Concentrator
- Waste Rock Emplacement Area
- Concentrate storage building
- Gold room
- Settling dam
- Fuel tank and bay
- Tailings Seepage Collection Pond

Existing hazardous materials infrastructure to be retained for Site will continue to be managed in accordance with all relevant guidelines, codes, and standards.

The only hazardous materials to be stored at Site under this HMMP will be explosive materials at the Hera Mine magazine (see **Section 4.1.1**) and diesel. Dangerous goods, as defined by the Australian Dangerous Code (ADG) are required at Site, this HMMP will be updated accordingly.

It's noted that for the purpose of transport, diesel is not considered a dangerous good by the ADG.

Potentially hazardous materials existing on the Hera Mine are outlined in **Table 5**.

Table 5: Existing Hazardous Materials at Hera Mine site

Reagent	Purpose	Delivery Method	Reagent Form	Maximum Storage	DG Class	Packing Group	Comment	Site Category	Storage Location
Diesel	Fuel	Direct delivery	Liquid	250 000L	N/A ¹ (C1)	N/A	Not hazardous ²	POL	Refuelling bay (Hera Mine) Power Plant (Hera Mine)
LPG	Gold room furnace	1t storage vessel (Elgas)	Liquefied gas	7.5m ³ Storage vessel (Elgas)	2.1	N/A	Not hazardous ²	POL	Reagent Preparation Area (Hera Mine)
ANFO	Explosive	500kg bulk bags	Off-white solid prills	15t	1.5	II	Hazardous	Explosives	Magazine (Hera Mine)

Note 1: Diesel is not classed as a Dangerous Good but is a C1 combustible.

Note 2: Although not hazardous this chemical will require management.

Other hazardous materials will not be used or stored at Site during the initial stages of operation. Should Site wish to store or use additional hazardous materials, this HMMP will be updated accordingly.

All hazardous materials at Site are transported, stored, and handled in accordance with the relevant standards and legislation including *AS/NZ 4452:1997 – The Storage and Handling of Toxic Substances* and the EPA's standard *Storing and Handling Liquids: Environmental Protection 2007*.

4. MANAGEMENT MEASURES

4.1. Existing Hazardous Materials Management Measures to Continue

A summary of hazardous materials management measures existing at Hera Mine which are to be continued are outlined in **Table 6** and described further in the sections below.

Table 6: Existing Hazardous Material Management Measures

Source	Control Procedure	Person Responsible
Hazardous Material Storage Facilities (Hera Mine)		
Stores	<ul style="list-style-type: none"> Existing storage facilities at Hera Mine (listed in Section 3) will continue to be utilised for Site. Follow the storage protocols in this HMMP. Toxic substances stored and handled in accordance with <i>AS/NZ 4452:1997 – The Storage and Handling of Toxic Substances</i>. Storage facilities comply with the EPA's standard <i>Storing and Handling Liquids: Environmental Protection</i> (2007). 	Environment Superintendent
Waste	<ul style="list-style-type: none"> Hazardous, non-combustible and contaminated waste material temporarily stored in Workshop Waste Management Area in appropriate containers. Removed off-Site by licensed contractor for disposal or recycling. 	Environment Superintendent
Classification and Inventory of Hazardous Materials		
Safety Data Sheet (SDS)	<ul style="list-style-type: none"> Majority of Site's hazardous materials grouped into four categories: <ul style="list-style-type: none"> Petroleum, Oils and Lubricants (POLs) Explosives Cyanide; and Other hazardous chemicals Up to date records (i.e. SDS) kept on Site of all substances stored on Site, delivery method, quantity, form, and storage location. SDS kept with any substance posing a risk to people or environment. 	Environment Superintendent
Personal Protective Equipment (PPE)		
Personnel	<ul style="list-style-type: none"> All relevant personnel to be trained in handling hazardous materials and use of PPE. Appropriate PPE, spill kits, SDSs to be made available to personnel transporting, handling, storing, using, and disposing of hazardous materials. Above mentioned safety items to be located in hazardous materials transport vehicles and any storage/handling facilities. All personnel handling/using/transporting hazardous materials are to receive the appropriate training. 	Environment Superintendent
Disposal of Wastes		
Waste material management	<ul style="list-style-type: none"> Waste generation to be minimised as far as practicable using recover, re-use and recycle principles. All Hera Resources employees and contractors to label (where appropriate) and dispose of waste into correct bins. 	Environment Superintendent

Source	Control Procedure	Person Responsible
Disposal	<ul style="list-style-type: none"> Site will correctly label and segregate all hazardous waste materials into the appropriate receptacles. All hazardous waste materials to be disposed of by licensed contractor in accordance with contractual requirements. 	Environment Superintendent
Petroleum, Oils and Lubricants		
Diesel	<ul style="list-style-type: none"> Diesel (and all other dangerous goods at Site) will be stored, handled, and transported in accordance with <i>AS 1940-2004 – The storage and handling of flammable and combustible liquids</i>. Three double wall self bunded storage tanks (approximately 68,000 L capacity each) at Hera Mine. Self-bunded diesel tanks at Federation Mine with a combined capacity of 160,000 L. Monthly (at minimum) visual inspections of storage tanks. Delivery records to be kept and made available for reference purposes if required. 	Environment Superintendent
Explosives		
Transportation to Hera Mine	<ul style="list-style-type: none"> Driver Code of Conduct implemented. Designated transport routes to be used. UN number and Dangerous Goods Class information for ANFO clearly displayed. Material Safety Data Sheet (MSDS) and other relevant information on ANFO from ChemAlert retained by driver and relevant personnel. Effective communication between driver and Site personnel established. Transport Management Plan implemented. 	Environment Superintendent
Transportation of Hazardous Materials		
Transport	<ul style="list-style-type: none"> Delivery of hazardous materials to Site, and between Hera Mine and Federation Mine only to be conducted by contractors who are certified to carry dangerous goods and have been trained in the <i>Australian Code for the Transport of Dangerous Goods by Road and Rail</i>. 	Environment Superintendent
Delivery Route	<ul style="list-style-type: none"> Hazardous materials will continue be delivered along the defined routes in Figure 5. 	Environment Superintendent
Monitoring	<ul style="list-style-type: none"> Delivery receipts will be kept as a record for all hazardous materials. 	Environment Superintendent

4.1.1. Explosives

The use of explosives at the Site are managed under Site's Explosive Principal Control Plan and are not managed under this HMMP.

Explosives will be used throughout the life of the Site, primarily to break up material underground. The primary explosives material will be Ammonium Nitrate Fuel Oil (ANFO). ANFO is a mixture of ammonium nitrate and fuel oil and is classed as a "Class 1.5" in accordance with the *Australian Code for the Transport of Dangerous Good by Road and Rail (Edition 7.7)*.

Explosive material (including any precursors) will continue to be stored at the Hera Mine magazine in secure self-contained storage units separated by earth bunds, as per *AS 2187.2 – 1993 Explosives Storage, Transport and Use, Part 2: Use of Explosives* requirements. The ANFO will be stored in 500 kg bags with an estimated maximum of 40 t stored at any one time. The magazines have been located so that they are the prescribed distance from other mining activities and infrastructure. No explosives will be stored at the new Federation Magazines under this HMMP, should this change the HMMP will be updated accordingly.

The magazine area will be fenced and locked. Access to the magazine will only be accessible by permitted employees and contractors approved by Hera Resources who hold the appropriate competencies issued by SafeWork NSW and approved by the Resources Regulator. Explosives are strictly regulated and only qualified and certified employees/contractors will be allowed to handle the explosives.

Records of access will be maintained by the Mine Manager for the life of the Site. All explosives will be handled at Site in accordance with the requirements of the Resource Regulator.

4.1.2. Management of Cyanide

Cyanide will not be stored at Site during initial phases of construction and operation. This section describes the management measures Site will employ should cyanide be used at Site. Note, no processing plant is proposed to be built at Federation. Accordingly, no cyanide is required at the Federation. Should the situation change, this would require a modification to the Project Approval and a route selection study would be required in accordance with DPHI's *Hazardous Industry Planning Advisory Paper No.11 – Route Selection*.

Once in use at Site, cyanide will be stored at Hera Mine in accordance with *AS/NZS 4452:1997 – The Storage and Handling of Toxic Substances*. Cyanide is received and stored as sodium cyanide and is used during the process of gold recovery from ore. Cyanide is a potentially harmful chemical, which if not handled correctly, may have serious health, safety and environmental outcomes. The controls that provide safe storage, usage and waste management of cyanide at Site as well as the monitoring program for checking the adequacy of these controls, form the basis of this section.

This section has been prepared to be consistent with the principles of the ICMC.

Purchase and Transportation

A Traffic Management Plan (TMP) for Site has been prepared to the satisfaction of the Cobar Shire Council, Bogan Shire Council, and Transport for NSW. All transport of dangerous goods will be conducted in accordance with the TMP, DPE's *Hazardous Industry Planning Advisory Paper No.11. – Route Selection* and with the *Australian Code for the Transport of Dangerous Goods by Road and Rail*.

Site will purchase cyanide only from Code certified companies that supply and transport cyanide. A clear line of responsibility will be established for the accountability of training in safety, spill and emergency response procedures through a written agreement with producers, distributors and transporters. Cyanide transporters will be required to implement appropriate emergency response plans and capabilities and other measures for cyanide management.

Handling and Storage

Site operates an engineered approved automated cyanide transfer system designed to extract solution from isotainer, coupled mini-spargers used by Code certified transporters of cyanide. This system eliminates the potential for spills and manual handling of the product. This transfer will be undertaken within a designated bunded area within the Processing Plant. Storage containers and associated transfer pipes will be located within the bunded areas. Bunds will be inspected daily and if required, pumped into the Process Water Pond.

Operational Management

Site will implement management and operating systems designed to protect human health and the environment. This will be achieved through implementing procedures that clearly define the responsibilities of personnel in the management of cyanide during processing and disposal.

These procedures will address monitoring, inspections and maintenance checks on tanks, bunds, machines, instruments, metering pumps and the TSF.

All cyanide facilities will be operated in accordance with all relevant standards and specification. In addition tailings pipeline infrastructure connecting the Processing Plant and the TSF has been bunded to contain spills from potential line ruptures.

Detailed cyanide monitoring and management measures are described in the Water Management Plan. In summary, these include the following.

- Storage of tailings in the TSF which achieves a permeability of no less than 1×10^{-8} m/s to a depth of at least 600 mm of clay (or equivalent).
- Capture of seepage within a lined Tailings Seepage Pond that achieves a permeability of no less than 1×10^{-9} m/s.
- Clean water diversion structures around the TSF that have been designed for a Probable Maximum Flood Event.
- Use of a cyanide destruction process using hydrogen peroxide prior to tailings disposal to the TSF.
- Thickening tailings to reduce ponding in TSF.
- Maintaining concentration of Weak Acid Dissociable (WAD) cyanide in tailings discharged from the discharge point to the TSF not greater than 10mg/L (10 ppm).
- Maintaining concentration of WAD cyanide at the discharge point to the Process Water Pond not greater than 20mg/L (90th percentile) or 30mg/L (maximum).
- Monitoring of cyanide levels for both surface and ground water.

Additionally, a Safety Management Plan will be implemented detailing risk assessments and procedures to ensure the safety of personnel and contractors working within the Site.

The TSF has minimal ponding areas as the water from these ponds is automatically pumped to the Process Water Pond. The Process Water Pond will be inspected monthly by the Environment Team. The Process Water Pond will be daily monitored by the Processing plant personnel and any environmental concerns will be reported to the Environment Team.

Emergency Response

Emergency response procedures for cyanide, together with other hazardous materials, are detailed in **Section 6**.

4.1.3. Other Hazardous Chemicals

Diesel will be stored at site in portable, double wall self bunded storage tanks in accordance with *AS/NZ 4452:1997 – The Storage and Handling of Toxic Substances*. One storage tank with a capacity of approximately 67,000L will be located at Hera Mine. Two storage tanks with approximately 67,000L and one storage tank with 36,000L will be located at Federation Mine. Visual inspection of the tanks will be conducted at least monthly.

Other hazardous chemicals previously in use at Hera Mine under MP10_0910 were primarily used in the different processes for the extraction of gold and lead/zinc concentrate. These chemicals are no longer stored or used at Site at the current stage of development and operations. Should their use be required at Site, this HMMP will be updated accordingly.

4.1.4. Safety Equipment

The Site will be maintained and operated to minimize the possibility of a fire, explosion or release of polluting materials. The following communications, fire protection, spill control and clean up equipment are available on Site in case of an emergency.

- Absorbents / spill kits
- Pumping equipment
- PPE
- Telephone/Intercom
- Two Way Radio
- Portable Fire Extinguishers
- Water hose
- Hand shovels
- Eye wash, and
- Shower.

This equipment will be inspected and maintained as necessary to assure its proper operation if a pollution incident should occur. Further details on emergency management are found in **Section 6**.

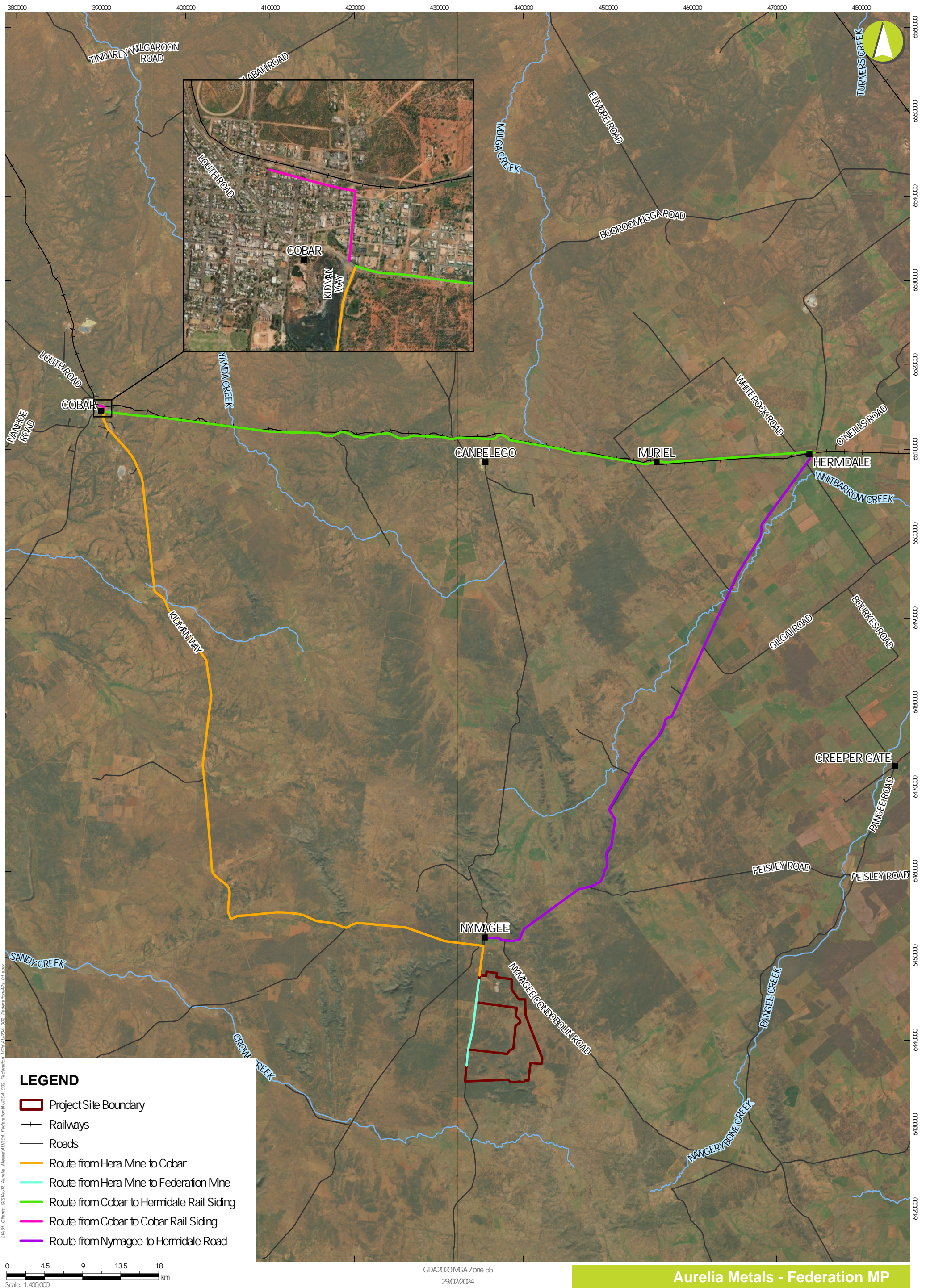
4.1.5. Transport of Dangerous Goods to Hera Mine

The transportation of hazardous materials to or from Site will only be undertaken by contractors who are certified to carry dangerous goods and have been trained in the *Australian Code for the Transport of Dangerous Goods by Road and Rail*. Transportation of hazardous materials to or from the Site will be undertaken in accordance with the DPE's *Hazardous Industry Planning Advisory Paper No.11 – Route Selection*.

Delivery receipts will be kept as a record for all hazardous materials.

The transport route for dangerous goods will remain as it was for the operation of Hera Mine under MP10_0191. The delivery routes presented in **Figure 5**.

No dangerous goods will be transported to Federation Mine under this HMMP during the initial phase of Site's construction and operation. Should Hera Resources require the transportation of dangerous goods to Federation Mine, this plan will be revised.



External Road Network

FIGURE 5

4.1.6. Hazardous Material Storage Facilities

Hazardous, non-combustible and contaminated waste material will be temporarily stored in the Hera Mine Workshop Waste Management Area and adjacent to the Federation Mine workshop, in sealed steel or plastic drums and shipped off-site for appropriate disposal or recycling.

Any toxic chemicals will be stored and handled in accordance with *AS/NZ 4452:1997 – The Storage and Handling of Toxic Substances*, and all containers used to store hazardous materials will be closed and sealed when not in use. Storage facilities will comply with the EPAs standard *Storing and Handling Liquids: Environmental Protection 2007*. All storage tanks and facilities will be regularly inspected on a monthly basis by the Processing Manager (or delegate) and maintained. Storage facilities will be clearly identified with proper labelling as storage facilities for hazardous materials. They will also be well ventilated in order to prevent build-up of toxic fumes or dust which could harm Hera Resources employees, contractors and/or the environment. The facilities will be secured and only authorised personnel will have access to the area.

4.2. Additional Hazardous Materials Management Measures

Hazardous materials in use at Federation Mine will be stored, handled, and disposed of in accordance with the process and legislative requirements described in **Section 4.1**. Additional information for the management of hazardous materials at Federation Mine are described below.

4.2.1. Preliminary Hazard Assessment

A Preliminary Hazard Assessment (PHA) was prepared for the Site's EIS in accordance with DPE's *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'* (HIPAP 6).

HIPAP 6 provides guidance on the general approach recommended for hazard analysis. The objective of hazard analysis is to develop a comprehensive understanding of the hazards and risks associated with an operation or facility and of the adequacy of safeguards. Considerations during the PHA included:

- The nature and quantities of hazardous materials stored and processed on the Site
- The type of plant and equipment in use
- The adequacy of proposed technical, operational and organisational safeguards
- The surrounding land uses or likely future land uses, and
- The interaction of these factors.

The PHA concluded that the risks associated with all potentially hazardous materials at Site would be considered tolerable with suitable engineering controls, operational controls and management controls in place which are described in this HMMP. The PHA was included as Appendix Q of the EIS.

4.2.2. Transport of Dangerous Goods to Federation Mine

Dangerous goods will be transported to Federation Mine via Burthong Road. Deliveries include explosive products ANFO and Ammonium Nitrate Emulsion (ANE), and diesel fuel. Transportation of hazardous materials to Federation Mine will only be undertaken by contractors who are certified to carry dangerous goods and have been trained in the *Australian Code for the Transport of Dangerous Goods by Road and Rail* using the defined routes as described in the TMP.

Delivery receipts will be kept as a record for all hazardous materials.

5. HAZARDOUS MATERIALS MONITORING PROGRAM

Hazardous materials monitoring will be undertaken to determine compliance with the SSD 24319456 and EPL 20179 criteria. Compliance with all environmental laws, regulation and guidelines, as well as SSD 24319456 will be monitored using:

- Annual Reviews
- Environmental inspections, and
- Independent Environmental Audits (IEAs).

Hazardous material data will be documented and reported in the Annual Review. IEAs will be provisioned for in accordance with the requirements described in **Section 8.4**. Environmental inspections of areas containing hazardous materials will be completed by the Environment Superintendent (or delegate) on a monthly basis.

6. CONTINGENCY PLAN

An emergency relating to hazardous materials may include:

- Traffic accidents during transportation of hazardous materials.
- Fires impacting storage or processing areas at Site.
- Spillage or release of hazardous materials during operational activities.

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

- Enacting evacuation and incident protocols.
- Notifying the relevant stakeholders.
- If required, alerting and assisting emergency services.

Site will also maintain a Pollution Incident Response Management Plan (PIRMP) that will provide additional guidance on specific actions to be undertaken in response to an emergency. Further detail regarding the corrective actions to be undertaken by Site in the event of unpredicted scenarios are described in **Section 6.1**. The following emergency planning and response sections have been developed in accordance with DPE's *Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning*.

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 7**.

Table 7: Trigger Action Response Plan

Key Element	Trigger/Response	Condition Green	Condition Red
Delivery of Sodium Cyanide	Trigger	Sodium Cyanide is delivered without incident.	A vehicle delivering sodium cyanide to the Site is involved in an accident/fire/spill.
	Response	No response required.	Implement Pollution Incident Response Management Plan. The plan includes: <ul style="list-style-type: none">– Contacting emergency services and advise location and severity of spill if known.– Isolate the spill area if possible.– Evacuate/assist in the evacuation of all persons within 1.3 km (unless emergency services advise otherwise).
Spillage of hazardous materials within Site	Trigger	No spillage or fire involving hazardous materials detected.	A spillage or fire involving a potentially hazardous material is reported within the Site and is a threat to human health.
OR			
A fire involving hazardous materials within Site	Response	No response required.	Enact the evacuation procedure described in Section 6.2.

6.2. Adaptive Management

Potential hazardous material 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 hazardous material related risks that are identified during the operation of the Site will be addressed in future updates of this HMMP.

6.3. Evacuation Plan

The following evacuation procedures will be implemented in the event of an incident that may cause harm to the environment or people.

1. First responders are to notify the Site manager (General Manager and / or Process Manager) either verbally or by mobile / two way radio.
2. If evacuation is confirmed by the Site manager, all staff will be evacuated to the designated evacuation area for Hera Mine or Federation Mine.
3. A sentry will be assigned to the front of the Site to keep out unauthorized persons.
4. The surface facility area gate will be locked by the Safety Manager (or delegate) after all personnel have been accounted for.
5. A sign will be placed on the front gate declaring the area contaminated.

Roles and responsibilities during a hazardous materials related emergency are described in **Section 6.4**.

6.4. Emergency Phases, Roles and Responsibilities

The phases of an emergency and the general response required by Site at each stage are as follows.

- **Alert Phase** – Monitor reported incident that does not require notifying.
- **Stand By Phase** – Prepare state of readiness if incident has the potential to escalate.
- **Call Out Phase** – Activate the emergency response procedures.
- **Clean Up Phase** – Clean-up when area declared safe.
- **Stand Down Phase** – Deploy response and implement a de-briefing and review of the HMMP and emergency response procedures.

The safety equipment available at Site to manage an emergency is outlined in **Section 4.1.4**. Following cessation of an emergency, the Planning Secretary will be notified via the Major Projects website as soon as practicable, see **Section 8**.

The key Site roles and responsibilities during an emergency are described in **Table 8**.

Table 8: Key Emergency Management Responsibilities

Roles	Phase	Responsibility
Position: General Manager 24 Hr Contact Details: TBA once Site operational	Alert	Must ensure adequate resources are available to enable implementation of emergency response procedures. Review and monitor reported incident.
	Stand-By	Give direction to notify the responsible personnel of the incident and prepare for a state of readiness if incident has the potential to escalate or is a notifiable incident.
	Call Out	Give direction to activate the emergency response procedures in the event of a pollution incident response. Monitor the situation and approve additional resources as required.
	Clean Up	Give direction to clean up the incident following advice that the area is declared safe.
	Stand Down	Give direction to Stand Down following satisfactory management of the incident.
Position: Process Manager or Delegate 24 Hr Contact Details: TBA once Site operational	Alert	As soon as aware, advise the General Manager of a pollution incident. Monitor reported incident.
	Stand-By	Notify the responsible personnel of the incident and prepare for a state of readiness if incident has the potential to escalate or is a notifiable incident.
	Call Out	If the General Manager cannot be contacted, activate the emergency response procedures in the event of a pollution incident.
		Notify all relevant agencies, as identified in Section 6.5.1 of the detail of the pollution incident.
		Activate the community communication plan as identified in Section 6.5.2 . Control the overall situation including and coordinate activities and resources.
		Determine the priority of actions of employees until agencies and emergency services arrive and then liaise with relevant agencies as required.
		Ensure that perimeters are established and access to the site is controlled.
	Clean Up	Monitor the situation and following confirmation that the area is safe advise the General Manager.
	Stand Down	Give direction for a de-briefing and review of the emergency response procedures.
Position: Environment Superintendent 24 Hr Contact Details:	General	Ensure that this Emergency Management Response is tested every 12 months.
		Ensure this HMMP is reviewed as identified in Section 12 . Ensure a hard copy is retained on site.
	Alert	As soon as aware, advise the Process Manager or, in their absence, the General Manager of a pollution incident. Monitor the reported incident.
Position: Environment Superintendent 24 Hr Contact Details:	Stand-By	Prepare for state of readiness when directed to by the Process Manager.
	Call Out	If neither the General Manager nor Process Manager can be contacted, activate the emergency response procedures in the event of a pollution incident response.

TBA once Site operational.		Contact the community and implement the required warning system as identified in Section 8 . Provide owners and occupiers of land updates of any spill incidents as required.
	Clean Up	Assist with clean up of the incident when advised that area is declared safe.
	Stand Down	Coordinate and manage de-briefing and review as directed by the Process Manager.
	General	Ensure employees are competent in Environmental Management through training and awareness programs.
		Ensure visitors and contractors are inducted and aware of emergency pollution incident management procedures. Ensure that all accidents, incidents and potential incidents are appropriately investigated.
All personnel	All	As soon as aware, advise supervisor of a pollution incident. In the absence of the supervisor, advise the Environment Team. In their absence advise the Process Manager, or if absent the General Manager. If none can be contacted then notify the relevant authorities as identified in Section 6.5 .
		Ensure training has been undertaken in the event of a pollution incident as identified in this HMMP.
		Ensure compliance with this HMMP.
		If safe to do so, undertake spill response procedures as outlined in Section 6 .

6.5. Reporting of Emergency Incidents

Following the termination of an emergency response, Hera Resources will contact the community and appropriate authority. **Table 9** describes the incidents that will be reported and to which authority.

Table 9: Spill Volumes Reportable to Government Agencies

Description of Contaminant	Reportable	Reporting Authority
Explosives	Unaccountable explosive material	SafeWork NSW DPE-RR Relevant Council
Petroleum, Oils and Lubricants	Spill of more than 20L	EPA DPE-RR
Sodium Cyanide	All incidents	EPA DPE-RR
Concentrate (if spilt during transport)	All incidents	EPA DPE-RR Relevant Council
Other Hazardous Materials	Potential to cause harm to people or the environment	EPA DPE-RR

Hera Resources will report any incident in accordance with the procedures outlined in **Section 8.2**.

6.5.1. Government Agencies

The government agencies to be contacted in the event of an emergency are outlined in **Table 10**.

Table 10: Government Agency Contacts

Trigger	Agency	Contact Details
An incident that presents an immediate threat to human health or property.	Fire and Rescue NSW NSW Police NSW Ambulance Services	Call 000
An incident that:	EPA	Environment Line 131 555
<ul style="list-style-type: none"> Does not require an initial combat agency, or 	NSW Health	Dubbo Base Hospital Phone (02) 6809 6809
<ul style="list-style-type: none"> Once the 000 call has been made. 	SafeWork NSW	Call 13 14 50
Notify the relevant authorities in the following order.	CSC	Business Hours (02) 6836 5888
	DPE	Call 1300 420 596

6.5.2. Community

A summary of the methods of communication, the general warning that may be provided and what phase would apply under that circumstance if a notifiable pollution incident occurs is provided in **Table 11**. Site will maintain a communications database to identify individual community members preferred method of communication.

Table 11: Community Communication Plan

Source of Risk	Method of Communication ¹	Warning Provided	Stage
Discharge of Hydrocarbons, Chemicals or Reagents.	Telephone	General warning to downstream residents to avoid the use of water in creeks.	Alert phase if pollution incident involves onsite discharge only. Operational phase if pollution incident involves offsite discharge.
	Text message		
	Email		
	Letter box drop		Stand down phase when the incident has been controlled and there is no harm present.
	Door knocking		
	Community Representatives.		
Discharge of chemical or saline- laden water.	Telephone	General warning to downstream residents to avoid the use of water in creeks (depending on scale of discharge).	Alert phase if pollution incident involves onsite discharge only. Operational stage if pollution incident involves offsite discharge.
	Text message		
	Email		
	Letter box drop		Stand down phase when the incident has been controlled and there is no harm present.
	Door knocking		
	Community Representatives.		
Discharge of Tailings material associated with a catastrophic failure of the Tailings Storage Facility.	Public announcements	General warning to downstream residents to avoid the use of water in creeks.	Standby phase if evidence of failure of Tailings Storage Facility.
	Radio		Callout phase if actual failure of Tailings Storage Facility.
	Television	Specific warning to evacuate high risk properties (if required).	
	Loudspeaker		Clean-up phase once discharge stabilised.
	Telephone		
	Text Message		
	Email		
	Letter box drop		
	Door knocking		
	Community Representatives.		

Source of Risk	Method of Communication ¹	Warning Provided	Stage
Discharge of gaseous material to air as a result of a failure of the gold room furnace scrubbing system.	Telephone	General Warning to Nymagee residents to keep windows and doors closed and report any respiratory symptoms.	Alert phase if pollution incident involves harm to people.
	Text message		
	Email		Operational stage if pollution incident involves risk of harm to people.
	Letter box drop		
	Door knocking		Stand down phase when the incident has been controlled and there is no harm present.
	Community Representatives.		
Discharge of particulate material to air as a result of the failure or under performance of the proposed dust control measures.	Telephone	General Warning to Nymagee residents regarding higher dust levels within the vicinity of the Site.	Alert phase if pollution incident involves potential harm to people. Operational stage if pollution incident involves harm to people.
	Text message		
	Email		Stand down phase when the incident has been controlled and there is no harm present.
	Letter box drop		
	Door knocking		
	Community Representatives.		

7. INCIDENT AND COMPLAINT MANAGEMENT

7.1. Incident and Non-compliance Protocol

Hera Resources will manage any incident or non-compliance at the Site in accordance with the incident and non-compliance protocols found 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 exceedance ceases and does not recur
- Consider all reasonable and feasible options for remediation (where relevant) and submit a report to the DPE describing those options and any preferred remediation measures or other course of action
- Implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary, and
- Submit an incident report within seven days of the original notification.

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 complaint related to hazardous materials.

Complaints can be directed to the Company via phone or email. These details are presented in **Table 12**.

Table 12: Contact Details for Complaints

Communication Method	Details
Email	complaints@aureliametals.com.au
Telephone	1300 016 240

Following receipt of any hazardous materials related complaint, Hera Resources would implement the following procedure:

1. The complaint will be reviewed to determine the nature, date and time of the complaint source.
2. Any relevant monitoring data for the period will be examined. The complainant will 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 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 may be communicated to the complainant.
5. Should the review of monitoring data indicate that a non-compliance of the relevant criteria, Hera Resources will notify the relevant government agencies. In addition, the complainant may be notified if required.

If multiple complaints are received from the same individual(s) and Hera Resources can demonstrate compliance to the relevant criteria and previous efforts have been made to resolve their issues, then Hera Resources may limit their response to Step 1 and 2.

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.*

Hera Resources will 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.

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 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.

As per item 2 of Appendix 6 of SSD 24319456, written notifications will include the following information:

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

In the event of an incident, and following the incident notification, Hera Resources will prepare an incident report and provide it to the Planning Secretary and any relevant public authorities as determined by the Planning Secretary. Hera Resources will provide the incident report within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary.

As per item 4 of Appendix 6 of SSD 24319456, incident reports will include:

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

In summary, a written report will be provided which will include the following:

- Describes the date, time, and nature of the exceedance
- Identifies the case (or likely cause) of the exceedance
- Describes the action to date, and
- Describes the proposed measures to address the exceedance.

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-compliance 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.

In summary, a written report will be provided within seven days via the Major Projects website which will include the following:

- Identify the condition Site is non-compliant with
- Describes the date, time, and nature of the exceedance
- Identifies the case (or likely cause) of the exceedance
- Describes the action to date, and
- Describes the proposed measures to address the exceedance.

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

9. ACCESS TO INFORMATION

Hera Resources will keep the community and relevant authorities informed of the Site's environmental performance through the implementation of communication measures as required by Condition C15 as stated below.

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.*

Hera Resources will ensure the above information is available to the public through the Aurelia website (www.aureliametals.com.au).

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).

10. ROLES AND RESPONSIBILITIES

The roles and responsibilities for Hera Resources personnel in relation to this HMMP are listed in **Table 13**.

Table 13: Roles and Responsibilities

Position	Accountable Task
General Manager	<ul style="list-style-type: none">• Ensure the resources are available for the implementation of this HMMP. Accountable for the overall environmental performance of the Project, including the outcomes of this HMMP.• Negotiation with relevant community members to achieve acceptable outcomes for issues that arise.
Environment Superintendent	<ul style="list-style-type: none">• Ensure staff have been made aware of their environmental responsibilities.• Ensure hazardous material storage is appropriately managed.• Ensure hazardous waste receptacles are appropriately labelled and accessible.• Make sure all hazardous materials contractors are appropriately licensed.
All Personnel	<ul style="list-style-type: none">• Use appropriate duty of care when handling hazardous materials.• Report all issues relating to hazardous materials to the Environment Team.• Contact the Environment Team if unsure how to dispose of potentially hazardous items appropriately.• Ensure any hazardous waste is deposited into the appropriate receptacle.

11. TRAINING AND AWARENESS

All personnel shall undergo Hazardous Materials management awareness training through the induction and re-induction process. Hazardous materials management shall be a component of the competency based site induction program. The following areas shall be covered in the induction.

- Awareness of the hazardous materials held on-site, and their potential to cause harm to people and the environment.
- Information on the sensitivity of the environment surrounding the site.
- Hera Resources environmental responsibilities.
- Use of the correct PPE and any appropriate and/or necessary health and safety training.
- Reporting procedures if there's a risk of surface water, groundwater or land contamination.
- Safe and correct use of all spill clean-up equipment or pollution prevention structures and/or devices on site.
- Safe handling and legal disposal of contaminated materials and wastes resulting from an incident, including arrangements for using specialist contractors and services.
- Emergency management procedures.

The Environmental Team shall be responsible for ensuring the appropriate training is included in the induction.

The Emergency Response Team will be trained in transporting, handling and transferring hazardous materials used on Site and the required emergency response. Specific procedures for training employees in environmental safety and health are included in the Emergency Response Plan.

12. REVIEW AND IMPROVEMENT

This HMMP 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 C8;*
- (b) the submission of an Annual Review under condition C10;*
- (c) the submission of an Independent Environmental Audit under condition C12; 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.

As part of the review process Site will assess the adequacy of the plan to meet the requirements contained in the relevant statutory approvals and any opportunities for improvement. The assessment will include a review of data and related trends identified in the Annual Review, a consideration of recommendations from an Independent Environmental Audit and findings arising from any incident report. If required the plan will be updated in consultation with the relevant authorities.

When this HMMP requires revision under any of the listed consent triggers above, the HMMP will be revised within six weeks of the trigger.

13. REFERENCES

- Department of Planning (2011) *Hazardous Industry Planning Advisory Paper No. 1 – Emergency Planning*
- Department of Planning (2011) *Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'*
- Department of Planning (2011) *Hazardous Industry Planning Advisory Paper No 11 – Route Selection*
- National Transport Commission (2020) *Australian Code for the Transport of Dangerous Goods by Road and Rail*
- Environment Protection Authority (2007) *Storing and Handling Liquids: Environmental Protection*
- The Transport Planning Partnership (2023) *Hera Mine and Federation Mine – Traffic Management Plan*
- International Cyanide Management Institute (2021) *The International Cyanide Management Code*
- AS/NZ 4452:1997 – *The Storage and Handling of Toxic Substances*
- AS 2187.2 – 1993 *Explosives Storage, Transport and Use, Part 2: Use of Explosives*
- AS 1940-2004 – *The storage and handling of flammable and combustible liquids*

APPENDIX A CONSULTATION

Mark Williams
Environmental Superintendent
Hera Resources Pty Limited
Address 353 Burthong Road
Nymagee, NSW, 2831

15/04/2025

Subject: Federation Mine – Consultation Request

Dear Mr. Williams

I refer to your submission dated 11 May 2025, requesting the Planning Secretary's agreement that consultation with nominated stakeholders is not required while making minor and administrative changes while revising management plans following approval of Modification 2 of the Development Consent for the Federation Mine (SSD- 24319456).

The Department notes that Modification 2 of the federation Mine project allowed:

- extension of haulage hours and increase of ore haulage up to 600,000 tpa
- Reclamation of tailings storage for paste backfill
- Minor rearrangement of infrastructure, including a new water tank.

The Traffic Management Plan, however, is proposed to be revised in consultation with TfNSW, Cobar Shire Council and Bogan Shire Council and not CPHR.

Accordingly, as nominee of the Planning Secretary and in accordance with Schedule 2 Condition A23, I agree with your request and advise that consultation not be required for the following plans:

- Water Management Plan
- Waste Rock Management Plan
- Air Quality and Green House Gas Management Plan
- Noise Management Plan
- Environmental Management Strategy
- Blast Management Plan
- Hazardous Materials Management Plan
- Biodiversity Management Plan

- Rehabilitation Strategy

Please ensure you make the management plans publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

A handwritten signature in black ink, appearing to be 'SOD', written in a cursive style.

Stephen O'Donoghue
Director
Resource Assessments

As nominee of the Planning Secretary