



The Registered Manager
Galena Mining Limited
PO BOX 8187
SUBIACO EAST WA 6008

Attention: Paul Rokich

Dear Sir

APPROVAL FOR MINING PROPOSAL WITH A MINE CLOSURE PLAN- ABRA BASE METALS PROJECT MINING PROPOSAL AND MINE CLOSURE PLAN REVISION 3 ON G 52/292, L 52/194 and M 52/776.

ENVIRONMENTAL GROUP SITE NAME: Abra Environmental Group (S0237582)
ENVIRONMENTAL GROUP SITE: Abra-Mulgul (J00545)
REGISTRATION ID: 76773

I refer to your Mining Proposal and Mine Closure Plan dated 24 May 2019. The Mining Proposal and Mine Closure Plan have been assessed by the Department of Mines, Industry Regulation and Safety (DMIRS) and determined to provide the information required in the guidelines approved under section 700 of the *Mining Act 1978* (WA) (the Mining Act).

I hereby approve the Mining Proposal and Mine Closure Plan.

Approval is restricted to undertaking the mining activities detailed in the activity details Tables 5, 6 & 7 and key mine activities Tables 8 - 13 of the Mining Proposal. These activities must be undertaken within the approved disturbance envelope, as specified by the spatial data provided with the approved Mining Proposal, which is represented in Schedule 1.

The site will be required to achieve the environmental outcomes detailed in Table 39 of the Mining Proposal. Any changes to these outcomes must be assessed and approved via resubmission of a Mining Proposal and Mine Closure Plan.

Please note the comments in Schedule 2 which must be addressed in the next version of the Mine Closure Plan. The Mine Closure Plan must be revised and re-submitted with the Department in May 2022, in accordance with the revised tenement conditions (see Schedule 3).

I advise that I intend to recommend the Minister for Mines and Petroleum's delegate impose further conditions on G52/292, L52/194 and M52/776, as outlined in Schedule 3. Further correspondence will be sent from DMIRS once the conditions are imposed.

Important – please note that you must submit a revised Mining Proposal and Mine Closure Plan for assessment and approval in the following circumstances:

- When any disturbance is proposed outside the approved disturbance envelope;
- The characteristics of any 'Key Mine Activities' detailed in the Mining Proposal need to be altered; or
- A new activity, or change to an activity type, beyond that listed in the Mining Proposal is proposed.

This approval does not supersede any other applicable provisions of the Mining Act, or remove the need for any necessary approvals from other authorities.

You are reminded that you are required to report disturbance data on an annual basis and pay any corresponding levy in accordance with the *Mining Rehabilitation Fund Act 2012* and associated Regulations.

Please be reminded of your obligation to carry out the mining operation in accordance with the provisions of the *Mines Safety and Inspection Act 1994* and Regulations 1995. You must have an approved Project Management Plan (PMP) in place prior to commencing construction or mining operations.

Further to this, if your proposal is clearing native vegetation a clearing permit under Part V Division 2 of the *Environmental Protection Act 1986* for clearing of native vegetation will be required.

Should you have any queries regarding this letter, please contact Environmental Officer - Lawson Brandis on (08) 9222 3718.

Yours faithfully



Karen Caple

Acting Executive Director Resource and Environmental Compliance

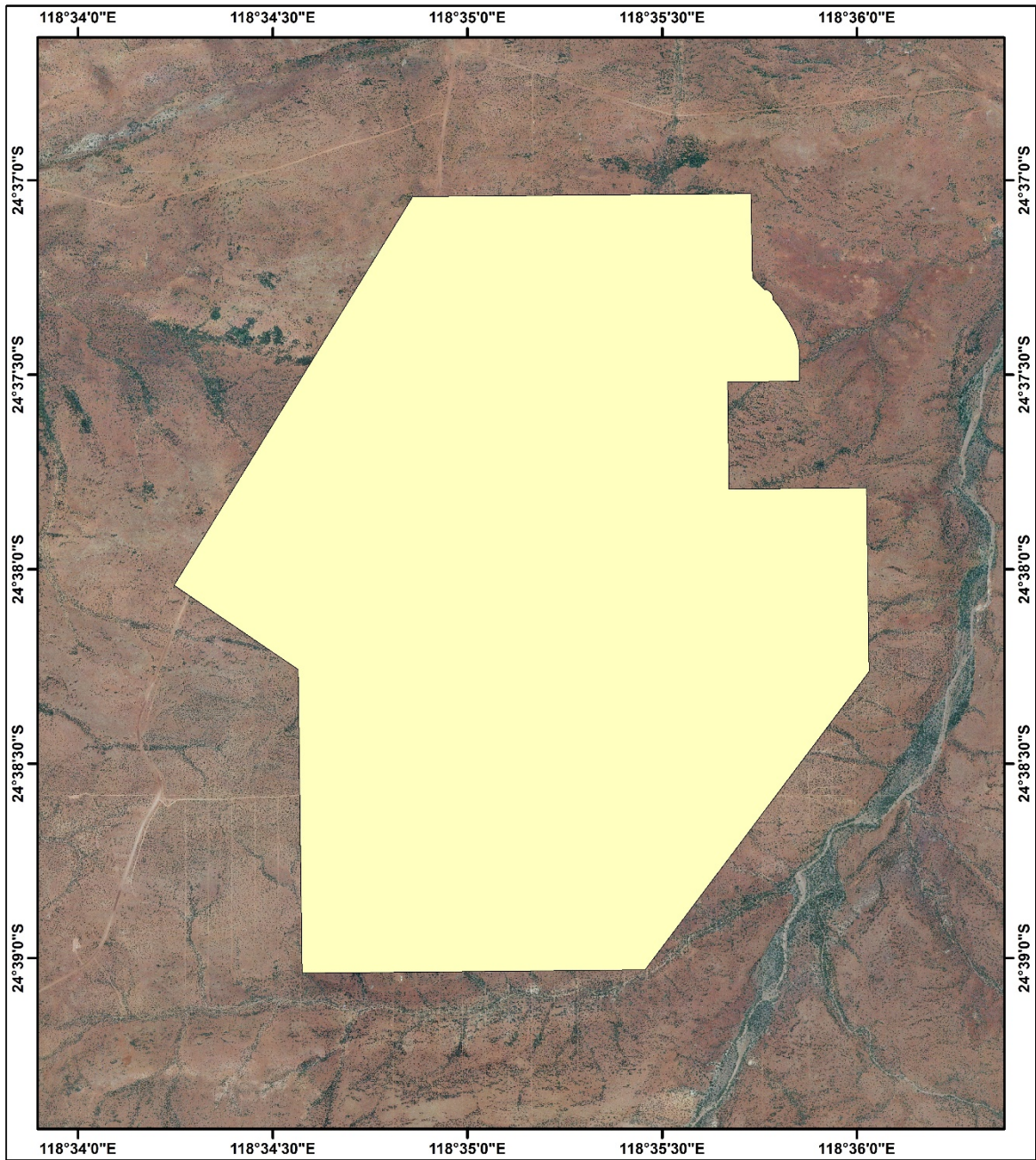
Resource and Environmental Compliance Division

10 June 2019

*Attach: Schedule 1: Approved Disturbance Envelope
Schedule 2: Areas of the Mine Closure Plan that require further development in the next revision
Schedule 3: Recommended further conditions*

SCHEDULE 1: Approved Disturbance Envelope

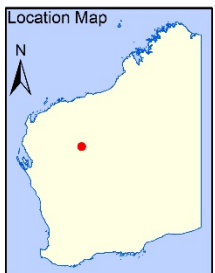
REG ID 76773 APPROVED DISTURBANCE ENVELOPE



Legend

Approved Disturbance Envelope

Scale: 1:25,000



Government of Western Australia
Department of Mines, Industry Regulation and Safety

Map Produced by: Department of Mines,
Industry Regulation and Safety
Resource and Environmental Compliance Division

Date: 06/06/2019

Datum: Geocentric Datum of Australia '94
Orthophotography from Landgate

SCHEDULE 2: Areas of the Mine Closure Plan that require further development in the next revision

Section of the Mine Closure Plan	Comments
General comments	Throughout the MCP reference is made to the “final MCP”. Please note that the “final MCP” is simply the most recently approved MCP, thus this MCP is currently the “final MCP”. In future iterations it should simply be referred to as ‘the MCP’.
Post mining land use	The current proposed PMLU is to return the site for pastoral activities, however it is noted that this has not been proposed to, or agreed with key stakeholders. Future iterations of the MCP should be developed to the proposed PLMU.
	Provide conceptual landform design diagrams in the next iteration of the MCP.
Development of completion criteria	As no post mining land use has been discussed with key stakeholders (pastoralist), completion criteria have not been informed by stakeholder consultation. In the next iteration of the MCP completion criteria should be discussed with key stakeholders and be documented in the MCP.
Identification and management of closure issues	Control measures for the various potential impacts should be reviewed and made clearer in the next MCP.
Closure implementation	While general closure requirements are described in section 8.4 of the MCP, the MCP refers to a ‘Task Register’ numerous times however, the task register provided as Appendix B is completely empty. It is noted that Galena will add to this register as mine features are constructed. In the next version of the MCP the task register must be more detailed otherwise it shouldn’t be included.
	Include a decommissioning section in the next iteration of the MCP. It is noted that in the early stages of a mine’s life this section may contain limited detail.
Closure monitoring and maintenance	<p>In the next MCP provide more detail on the following:</p> <ul style="list-style-type: none"> • Monitoring methodologies to be utilised; • How monitoring takes into account the wider receiving environments, receptors and exposure pathways; • Quality control systems and procedures for monitoring; • Any trends that are developing; and • Contingency strategies for if monitoring data indicates environmental indicators move outside closure criteria.
Financial provisioning for closure	The next MCP needs to include more detail regarding financial provisioning for closure, particularly cost estimate methodology, as per section 4.14 of the Guideline.
Management of Information and Data	Please provide additional details regarding internal record keeping systems in the next iteration of the MCP.

SCHEDULE 3: Recommended further conditions

RECOMMENDED FURTHER CONDITIONS FOR GENERAL PURPOSE LEASE 52/292

Please impose the following new conditions:

6. All mining operations to meet the environmental outcomes as measured by the performance criteria stated in Table 39 of the mining proposal (Reg ID: 76773) "Abra Base Metals Project - Mining Proposal – Version 3" dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 661]**
7. All ground disturbance to be undertaken within the disturbance envelope as represented by the spatial data provided on 30 October 2018 and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6116799. **[MTSD: Standard Condition 669]**
8. No alteration or expansion of mining operations beyond the activities detailed in Table 5 - 7 and Tables 8 – 13 of the mining proposal (Reg ID: 76773) "Abra Base Metals Project - Mining Proposal – Version 3" dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 670]**
9. Management of mine closure is to be undertaken in accordance with the Mine Closure Plan (Reg ID: 76773) "Abra Base Metals Project – Mine Closure Plan – Version 3" dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 662]**
10. Report any incident arising from mining activities that has caused, or has the potential to cause environmental harm or injury to land, to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety, within 24 hours of becoming aware of the occurrence of the incident. **[MTSD: Standard Condition 671]**
11. Report any breach of environmental outcome or performance criteria stated in table 39 of the mining proposal (Reg ID: 76773) "Abra Base Metals Project - Mining Proposal – Version 3" dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767, to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety within 24 hours of becoming aware of the occurrence of the breach. **[MTSD: Standard Condition 672]**
12. The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform. **[MTSD: Standard Condition 384]**
13. All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses. **[MTSD: Standard Condition 385]**
14. All rubbish and scrap is to be progressively disposed of in a suitable manner. **[MTSD: Standard Condition 387]**
15. Take all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities. **[MTSD: Standard Condition 659]**

16. Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles. **[MTSD: Standard Condition 401]**
17. Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability to the satisfaction of the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 573]**
18. On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or an alternative agreed outcome to the satisfaction of the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 388]**
19. An annual environmental report is to be submitted to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety, outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programs for the next 12 months. This report to be submitted each year in: **[MTSD: Standard Condition 392]**
 - May
20. The construction of any tailings storage embankment shall be supervised by an engineering or geotechnical specialist. **[MTSD: Non-Standard Condition]**
21. The construction details of any tailings storage embankment shall be documented by an engineering or geotechnical specialist and confirm that the construction satisfies the design intent. The construction document shall include the records of all construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with the reasons why the modifications were necessary. The construction document shall also present as-built drawings for the embankment earthworks and pipework. A copy of the construction document shall be submitted to DMIRS for its records. **[MTSD: Non-Standard Condition]**
22. The tailings storage facility shall be checked on a routine daily basis by site personnel during periods of deposition to ensure that the facility is functioning as per the design intent. **[MTSD: Non-Standard Condition]**
23. An engineering or geotechnical specialist shall audit and review the active tailings storage facility on an annual basis. The specialist shall review past performance, validate the design, examine tailings management, and review the results of monitoring. Any deficiencies noted in the audit and review report shall be suitably addressed and improved. The audit and review report shall be submitted to DMIRS and should be accompanied by a recent survey pick-up of the facility and an updated tailings storage data sheet. **[MTSD: Non-Standard Condition]**
24. At the time of decommissioning of the tailings storage facility and prior to rehabilitation, a further review report by a geotechnical or engineering specialist shall be submitted to DMIRS. This report should review the status of the structure and its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should also be addressed. **[MTSD: Non-Standard Condition]**
25. All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 657]**

26. A Mine Closure Plan is to be submitted in the annual environmental reporting month specified in tenement conditions in the year specified below, unless otherwise directed by the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. The Mine Closure Plan is to be prepared in accordance with the “Guidelines for Preparing Mine Closure Plans” available on the Department of Mines, Industry Regulation and Safety website: **[MTSD: Standard Condition 578]**
- 2022

RECOMMENDED FURTHER CONDITIONS FOR MISCELLANEOUS LICENCE 52/194

Please impose the following new conditions:

15. All mining operations to meet the environmental outcomes as measured by the performance criteria stated in Table 39 of the mining proposal (Reg ID: 76773) “Abra Base Metals Project - Mining Proposal – Version 3” dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 661]**
16. All ground disturbance to be undertaken within the disturbance envelope as represented by the spatial data provided on 30 October 2018 and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6116799. **[MTSD: Standard Condition 669]**
17. No alteration or expansion of mining operations beyond the activities detailed in Table 5 - 7 and Tables 8 – 13 of the mining proposal (Reg ID: 76773) “Abra Base Metals Project - Mining Proposal – Version 3” dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 670]**
18. Management of mine closure is to be undertaken in accordance with the Mine Closure Plan (Reg ID: 76773) “Abra Base Metals Project – Mine Closure Plan – Version 3” dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 662]**
19. Report any incident arising from mining activities that has caused, or has the potential to cause environmental harm or injury to land, to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety, within 24 hours of becoming aware of the occurrence of the incident. **[MTSD: Standard Condition 671]**
20. Report any breach of environmental outcome or performance criteria stated in table 39 of the mining proposal (Reg ID: 76773) “Abra Base Metals Project - Mining Proposal – Version 3” dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767, to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety within 24 hours of becoming aware of the occurrence of the breach. **[MTSD: Standard Condition 672]**
21. The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform. **[MTSD: Standard Condition 384]**

22. All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses. **[MTSD: Standard Condition 385]**
 23. All rubbish and scrap is to be progressively disposed of in a suitable manner. **[MTSD: Standard Condition 387]**
 24. Take all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities. **[MTSD: Standard Condition 659]**
 25. Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles. **[MTSD: Standard Condition 401]**
 26. Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability to the satisfaction of the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 573]**
 27. On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or an alternative agreed outcome to the satisfaction of the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 388]**
 28. An annual environmental report is to be submitted to the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety, outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programs for the next 12 months. This report to be submitted each year in: **[MTSD: Standard Condition 392]**
 - May
 29. All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 657]**
 30. A Mine Closure Plan is to be submitted in the annual environmental reporting month specified in tenement conditions in the year specified below, unless otherwise directed by the Executive Director, Resource and Environmental Compliance Division, Department of Mines, Industry Regulation and Safety. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on the Department of Mines, Industry Regulation and Safety website:
 - 2022**[MTSD: Standard Condition 578]**
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**RECOMMENDED FURTHER CONDITIONS
FOR MINING LEASE 52/776**

Please revise the following existing conditions to read:

3. All disturbances to the surface of the land made as a result of exploration, including costeans, drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Mines, Industry Regulation and Safety. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, Department of Mines, Industry Regulation and Safety. **[MTSD: Standard Condition 4]**
5. Unless the written approval of the Environmental Officer, Department of Mines, Industry Regulation and Safety is first obtained, the use of drilling rigs, scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations. **[MTSD: Standard Condition 6]**
8. The lessee submitting a plan of proposed operations and measures to safeguard the environment to the Executive Director, Resource and Environmental Compliance, Department of Mines, Industry Regulation and Safety for their assessment and written approval prior to commencing any developmental or productive mining or construction activity. **[MTSD: Standard Condition 9]**

Please impose the following new conditions:

9. All mining operations to meet the environmental outcomes as measured by the performance criteria stated in Table 39 of the mining proposal (Reg ID: 76773) "Abra Base Metals Project - Mining Proposal – Version 3" dated 24 May 2019 signed by Troy Flannery, and retained on Department of Mines, Industry Regulation and Safety file no. EARS-MPMCP-76773 as Doc ID 6554767. **[MTSD: Standard Condition 661]**
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