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ABN 84 873 116 132

July 20, 2018

ORDINARY MEETING OF THE COUNCIL MEETING

TO BE HELD

WEDNESDAY, JULY 25, 2018

SUPPLEMENTARY AGENDA



JAMES RONCON  
GENERAL MANAGER

## **FURTHER BUSINESS**

1. BROKEN HILL CITY COUNCIL REPORT NO. 117/18 - DATED JULY 19, 2018 - LETTER OF SUPPORT - PROPOSED MODIFICATIONS TO ORE HAULAGE ROUTE AND EVAPORATIONS PONDS - NORTH MINE RECOMMENCEMENT PROJECT (13/4) ..... 3

## ORDINARY MEETING OF THE COUNCIL

July 19, 2018

**ITEM 1****BROKEN HILL CITY COUNCIL REPORT NO. 117/18**

**SUBJECT:** **LETTER OF SUPPORT - PROPOSED MODIFICATIONS TO ORE HAULAGE ROUTE AND EVAPORATIONS PONDS - NORTH MINE RECOMMENCEMENT PROJECT** **13/4**

**Recommendation**

1. That Broken Hill City Council Report No. 117/18 dated July 19, 2018, be received.
2. That Council supports Perilya's proposed modifications to development consent SSD 7538, which entails modifications to the approved ore haulage route and evaporation ponds, associated with the Broken Hill North Mine project.

**Executive Summary:**

Attached to this report is a letter from Perilya seeking Council's support for two proposed modifications to their development consent for the North Mine project.

The proposed modifications entails the following:

- a) Modifications to the approved haulage route which applies to all haulage and heavy vehicles accessing the mine site from Argent Street between Warren and Phillips Streets;
- b) Reduction of evaporation ponds.

**Report:**

Perilya has approached the Department of Planning and Environment (DPE) regarding amending two items in the North Mine development consent (DC).

The two items being:

1. The approved ore haulage route;
2. The approved evaporation ponds.

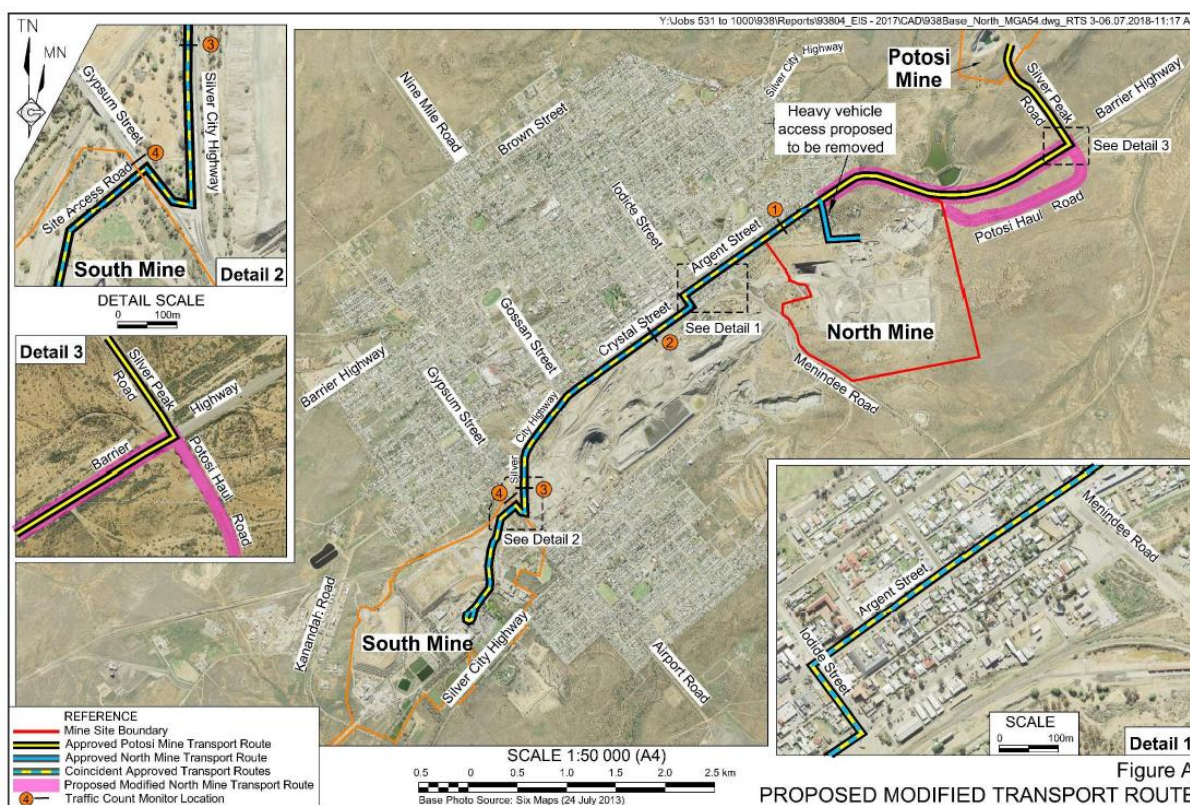
Item 1 - The approved ore haulage route is reproduced in Figure A below.

- Mine Site Access Road;
- Argent Street/Barrier Highway;
- Iodide Street;
- Crystal Street/Silver City Highway;
- Gypsum Street; and
- Southern Operations Site Access Road.

The condition of consent for the turn into North Mine off Argent Street called for:

- A Channelised Right Short [CHR(s)] turn treatment in accordance with Figure 7.18 Part 4A of Austroads Guide to Road Design and relevant RMS supplements.
- A Basic Left (BAL) turn treatment as shown in Figure 8.2 Part 4A of the Austroads Guide to Road Design and relevant RMS supplements.
- Designed and constructed for a 50km/h zone.

Subsequent to the granting of development consent, Roads and Maritime Services (RMS) brought to Perilya’s attention that to construct the intersection as described above would impose a number of unacceptable impacts on residents between 712 and 732 Argent Street.



The approved route poses the following impacts and associated risks:

- The CHR(s) would result in the existing verge being narrowed approximately 2-3 metres with the roadway closer to the property boundaries, and necessitating modifications to property pedestrian accesses,
- On-street parking would be removed for some distance between Warren and Phillips Streets, of note is that at least three of the residences impacted do not have off street access to their properties and currently use the parking lane for their personal cars and another would have the angle of vehicle access into their property steepened considerably,
- The relocation of a number of power poles in the immediate vicinity,
- Vehicles would pass at speed adjacent to the footpath, potentially posing a risk to pedestrians, particularly children.

**Proposed Amended Ore Haulage Route**

- Potosi Haul Road;
- Argent Street/Barrier Highway (entering at the existing Potosi Haul Road intersection);
- Iodide Street;
- Crystal St/Silver City Highway;

- Gypsum Street; and
- Southern Operations Site Access Road.

The proposed amended route, as highlighted in Figure A above, would apply to all ore haulage and heavy vehicles accessing the Mine Site. All other light vehicles would continue to access the Mine Site via the North Mine Site Access Road.

Perilya contends that the proposed modified ore haulage route would result in the following amended traffic-related impacts.

- Residents between 712 and 732 Argent Street would no longer be impacted by the required intersection works.
- Residents of 745 to 769 Haskard Street, which back on to Argent Street, would experience a minor increase in heavy vehicle movements to the rear of their properties that back onto the Barrier Highway/Argent Street.

Perilya contends that the proposed modified ore haulage route would result in a net benefit.

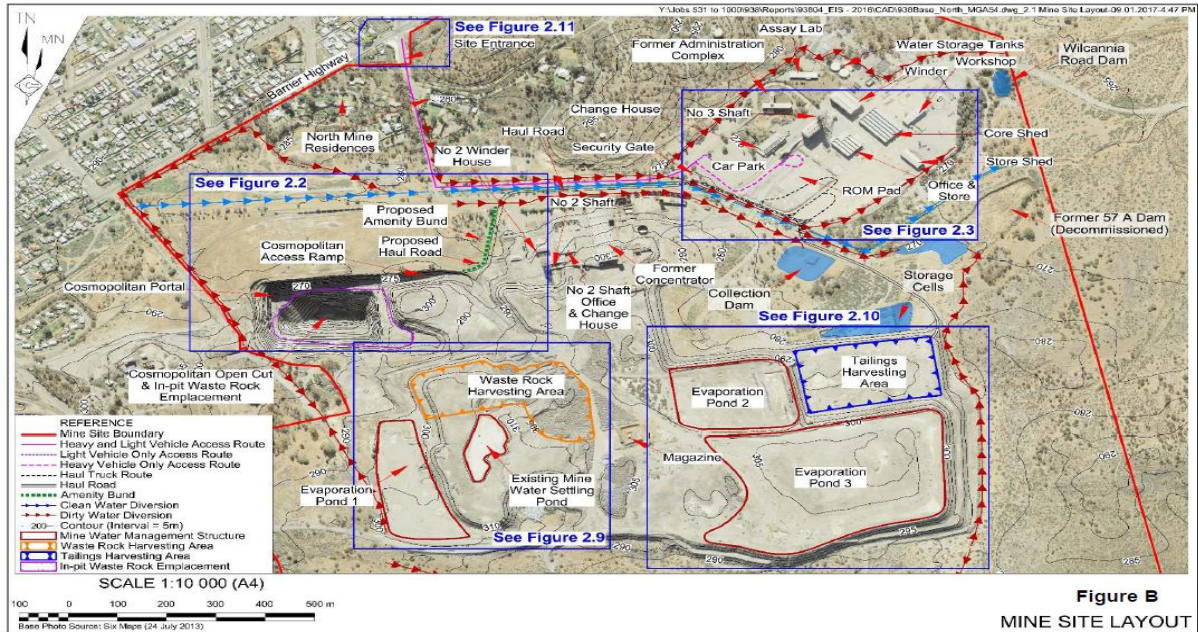
#### Item 2 – Approved evaporation ponds

The approved evaporation ponds are reproduced in **Figure B** labelled, evaporation ponds 1, 2 and 3.

Perilya's calculations allowed for natural evaporation of all water removed from North Mine, given predicted pumping rates and Broken Hill evaporation and rainfall rates, the calculation showed a surface area of 16ha was required. The initial placement of the ponds was determined utilising available free areas at North Mine that totalled 16ha. Ensuing investigation has determined that the required surface area can be significantly reduced through assisted evaporation and more judicious means of available water utilisation.

Additionally, Perilya reviewed the placement of the approved ponds, being on top of historical tails storage facilities (TSF) and any risk posed during construction and operation of the ponds. Through review of the above Perilya determined that relocation of the ponds at a reduced surface area was warranted, the proposed relocation and smaller pond area is reproduced in **Figure C** and **Figure D** labelled, evaporation pond area.

As a result of the above Perilya have approached DPE to consider revising the approved evaporation pond placement and surface area.



**Anticipated Impacts**

Perilya contends that the proposed modified evaporation pond placement and surface area would result in the following amended impacts.

- Relocation of ponds from historical TSF surfaces
- Nil disturbance of tailings during construction, resulting in reduced risk to air quality.
- Reduction in pond surface area.
- Reduction in potential community disturbance during construction and operation as pond area is at a lower level and protected by landforms
- Top soils harvested from relocated pond site can be used to rehabilitate areas of original pond placement.

Due to the above, Perilya contends that the proposed modified evaporation pond placement and surface area reduction would result in a net benefit.

**Conclusion**

Council’s Development and Planning staff perused above proposal and raises no objection to the proposed modifications. It is recommended that Council issue the developer with a letter of support as requested on 19 July 2018.

**Strategic Direction:**

- Key Direction: 3 Our Environment
- Objective: 3.3 Proactive, Innovative and Responsible Planning supports the community, the environment and beautification of the City
- Function: Built Environment
- DP Action: Ensure compliance activities promote public safety and environmental control

**Relevant Legislation:**

- Environmental Planning and Assessment Act 1979*
- Environmental Planning and Assessment Regulation 2000*

*State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*

**Financial Implications:**

Nil

**Attachments**

1. [↓](#) Proposed modification to North Mine Project

ANTHONY MISAGH  
CHIEF OPERATIONS OFFICER

JAMES RONCON  
GENERAL MANAGER

Perilya Broken Hill Limited  
ABN: 46 099 761 289



19 July 2018

Mr James Roncon  
General Manager  
Broken Hill City Council  
PO Box 448  
Broken Hill, NSW, 2880

Originally sent by email: [roncon@brokenhill.nsw.gov.au](mailto:roncon@brokenhill.nsw.gov.au)

**Re: Broken Hill North Mine – Proposed Modified Ore Haulage Route and Evaporation Ponds**

Dear James,

Perilya has approached the Department of Planning and Environment (DPE) regarding amending two items in the North Mine development consent (DC).

The two items being:

1. The approved ore haulage route;
2. The approved evaporation ponds.

**Item 1**

Approved Ore Haulage Route

The approved ore haulage route is reproduced in **Figure A**.

- Mine Site Access Road;
- Argent Street/Barrier Highway;
- Iodide Street;
- Crystal Street/Silver City Highway;
- Gypsum Street; and
- Southern Operations Site Access Road.

The condition of consent for the turn into North Mine off Argent Street called for:

- A Channelised Right Short [CHR(s)] turn treatment in accordance with Figure 7.18 Part 4A of Austroads Guide to Road Design and relevant RMS supplements.



- A Basic Left (BAL) turn treatment as shown in Figure 8.2 Part 4A of the Austroads Guide to Road Design and relevant RMS supplements.
- Designed and constructed for a 50km/h zone.

Subsequent to the granting of development consent, Roads and Maritime Services (RMS) brought to Perilya's attention that to construct the intersection as described above would impose a number of unacceptable impacts on residents between 712 and 732 Argent Street.

RMS first suggested considering a modification to the approved route in an email to Perilya on 31 May, this was followed with telephone conversations and further emails during which RMS tabled for consideration modifying the approved ore haulage route to access North Mine via the Potosi Haulage Road, this resulted in a request from Perilya for RMS to attend a meeting at the entrance to North Mine to gain an understanding of the RMS concerns and discuss the issue in detail.

This meeting took place 27 June, it was at this meeting that the full impact of the consent item was realised by Perilya, impacts that include:

- The CHR(s) would result in the existing verge being narrowed approximately 2-3 metres with the roadway closer to the property boundaries, and necessitating modifications to property pedestrian accesses,
- On-street parking would be removed for some distance between Warren and Phillips Streets, of note is that at least three of the residences impacted do not have off street access to their properties and currently use the parking lane for their personal cars and another would have the angle of vehicle access into their property steepened considerably,
- The relocation of a number of power poles in the immediate vicinity.
- Vehicles would pass at speed adjacent to the footpath, potentially posing a risk to pedestrians, particularly children.

As a result of the above, and the support from RMS for a revision of the approved route, Perilya have approached DPE to consider revising the approved haulage route.

#### **Proposed Amended Ore Haulage Route**

- Potosi Haul Road;
- Argent Street/Barrier Highway (entering at the existing Potosi Haul Road intersection);
- Iodide Street;
- Crystal St/Silver City Highway;
- Gypsum Street; and
- Southern Operations Site Access Road.

The proposed amended route, as highlighted in **Figure A**, would apply to all ore haulage and heavy vehicles accessing the Mine Site. All other light vehicles would continue to access the Mine Site via the North Mine Site Access Road.

The proposed modified ore haulage route would require the following works to be completed.

- Minor modifications to the existing Potosi Haul Road intersection to ensure that it complies with the BAL/BAR requirements for a right turn in/left turn out arrangement.

Perilya notes that the installation of a wheel wash facility at the rear/eastern entrance to the Mine Site is an existing condition of consent.

The proposed modification would remove the requirement for an upgrade or modification of the North Mine Site Access Road / Argent Street intersection.

### **Anticipated Impacts**

Perilya contends that the proposed modified ore haulage route would result in the following amended traffic-related impacts.

- Residents between 712 and 732 Argent Street would no longer be impacted by the required intersection works.
- Residents of 745 to 769 Haskard Street, which back on to Argent Street, would experience a minor increase in heavy vehicle movements to the rear of their properties that back onto the Barrier Highway/Argent Street.

Perilya contends that the proposed modified ore haulage route would result in a net benefit.

### **Item 2**

#### Approved Evaporation Ponds

The approved evaporation ponds are reproduced in **Figure B** labelled, evaporation ponds 1, 2 and 3.

Perilya's calculations allowed for natural evaporation of all water removed from North Mine, given predicted pumping rates and Broken Hill evaporation and rainfall rates, the calculation showed a surface area of 16ha was required.

The initial placement of the ponds was determined utilising available free areas at North Mine that totalled 16ha.

Ensuing investigation has determined that the required surface area can be significantly reduced through assisted evaporation and more judicious means of available water utilisation.

Additionally, Perilya reviewed the placement of the approved ponds, being on top of historical tails storage facilities (TSF) and any risk posed during construction and operation of the ponds.

Through review of the above Perilya determined that relocation of the ponds at a reduced surface area was warranted, the proposed relocation and smaller pond area is reproduced in **Figure C** and **Figure D** labelled, evaporation pond area.

As a result of the above Perilya have approached DPE to consider revising the approved evaporation pond placement and surface area.

### **Anticipated Impacts**

Perilya contends that the proposed modified evaporation pond placement and surface area would result in the following amended impacts.

- Relocation of ponds from historical TSF surfaces
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- Top soils harvested from relocated pond site can be used to rehabilitate areas of original pond placement.

Due to the above, Perilya contends that the proposed modified evaporation pond placement and surface area reduction would result in a net benefit.

**Next Steps**

The DPE have agreed to review a DC amendment application and Perilya's consultants are developing the amendment application.

DPE have also requested that the application includes letters of support, or otherwise, from the stakeholder agencies including BHCC, RMS and EPA, hence this approach to BHCC.

I thank the Council in advance for their understanding and assistance in this matter.

Please do not hesitate to contact me should you require additional information or clarification.

Yours sincerely,



**Geoff Hender**  
Deputy General Manager  
Perilya Broken Hill Limited

Attachments: Figure A, Figure B, Figure C and Figure D

