



**WHIM CREEK COPPER PROJECT**

**CLEARING PERMIT APPLICATION -**

**PURPOSE PERMIT**

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July 2021

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## 1. PROJECT DESCRIPTION

### 1.1 Scope

The Whim Creek Copper Project is located approximately 120 km from Karratha and Port Hedland in the Pilbara of Western Australia (Figure 1). Straits Resources Ltd commenced mining in 2004 and operated the site until 2009 when mining was discontinued, and the site was placed on Care and Maintenance. However, processing of the heap leach was conducted intermittently until 2019.

The current operator of the site, Whim Creek Metals Pty Ltd (a wholly owned subsidiary of Anax Metals Ltd), in joint venture with Venturex Pilbara Pty Ltd (the minority interest holder in the Project and a wholly owned subsidiary of Venturex Resources Ltd), is proposing to recommence mining at the Project in 2022. Mining will initially focus on the expansion of the existing pit and waste rock landform at the Mons Cupri deposit and Anax is seeking approval under Part V of the *Environmental Protection Act 1986* (EP Act) to clear vegetation for the development.

The total clearing area required for the Project is up to 60 ha of remnant vegetation and existing landform rehabilitation within a 160 ha development envelope (DE) that coincides with a previous flora and vegetation survey area (**Figure 2**).

### 1.2 Proposal Tenure

*Mining Act 1978* tenure relevant to this Clearing Permit Application is M 47/238 currently held by Venturex Pilbara Pty Ltd (a wholly owned subsidiary of Venturex Resources Limited. Transfer of ownership of Whim Creek Metals Pty Ltd's interest in the tenements are pending. Mons Cupri is also located on both the Mallina and Sherlock Pastoral Leases.

### 1.3 Purpose

This report identifies the potential environmental impacts associated with the clearing, based on the best available data gathered during baseline environmental assessments. This NVCP application will be assessed by DMIRS, as clearing is to be carried out on tenements governed by the *Mining Act 1978*.

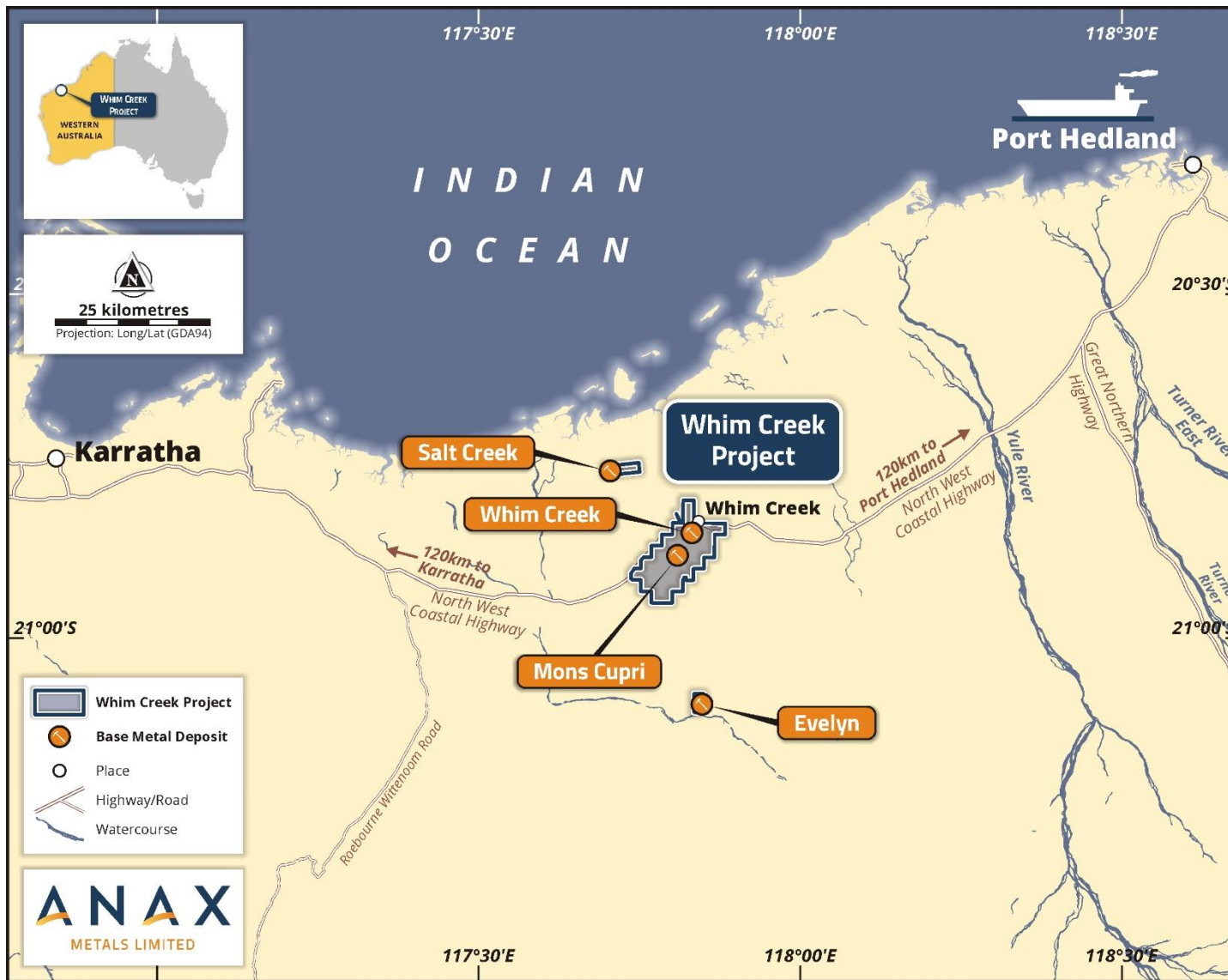


Figure 1: Whim Creek Project Location

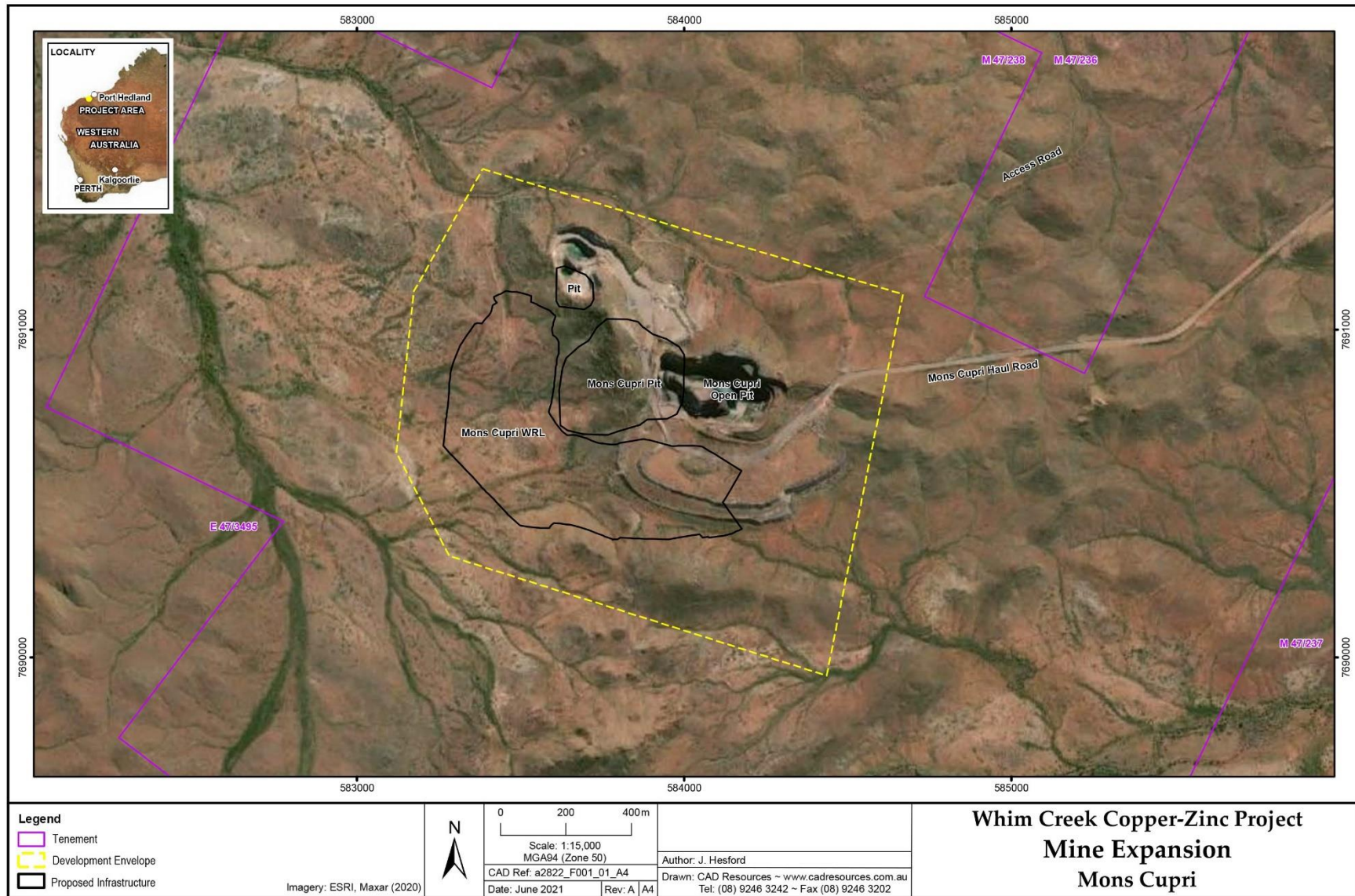


Figure 2: Mons Cupri Development Envelope and Proposed Infrastructure

## 2. RELEVANT ENVIRONMENTAL STUDIES

Vicki Long and Associates and Bamford Consulting Ecologists were engaged by Tetris Environmental to undertake flora, vegetation and fauna assessments to support the Clearing Permit application.

### 2.1 Flora and Vegetation

Numerous flora and vegetation and vegetation health surveys have been conducted across the Whim Creek project area to support project permitting. Vicki Long and Associates (VLA) were engaged by Tetris Environmental Pty Ltd (Tetris) in 2021 to conduct a desktop Flora and Vegetation assessment to review existing literature and databases, contemporise existing studies from surveys undertaken in 2006 at Mons Cupri and define the likelihood of occurrence of conservation significant flora species and vegetation (VLA, 2021). VLA are also conducting bi-annual vegetation monitoring via quadrats around the Whim Creek mine and local region. Field experience and data from this monitoring has contributed to their desktop assessment.

No Threatened Flora or Threatened Ecological Communities have been recorded in the vicinity of the Whim Creek Project area.

Two Priority species are likely to occur within the DE, *Heliotropium muticum* (P3) and *Goodenia nuda* (P4).

The mapped boundary of one Priority Ecological Community named the *Horseflat Land System of the Roebourne Plains* occurs approximately 1 km north of the Mons Cupri DE. These are characterised by extensive, weakly gilgai clay plains dominated by tussock grasslands on mostly alluvial non-gilgaied, red clay loams or heavy clay loams which is uncharacteristic of the land within and surrounding the DE.

Vegetation condition in the DE ranges from completely disturbed due to previous mining activities and good to excellent. Some common Pilbara weed species such as *Cenchrus ciliaris* (buffel grass) and *Aerva javanica* (Kapok bush) do occur in the DE.

### 2.2 Fauna

Bamford Consulting Ecologists (BCE) were engaged by Tetris to conduct a site reconnaissance or Basic level fauna survey to confirm the presence of habitat that would support conservation significant fauna species. An initial site visit was conducted over three days (7 to 9 April 2021) to review the DE and surrounding landscape and set some camera traps for two nights. The camera traps returned positive results for the presence of *Dasyurus hallucatus* (Northern Quoll) at Mons Cupri and Whim Creek mine sites (BCE, 2021). A mine adit was found to be used as a temporary roost by a small number of *Macroderma gigas* (Ghost Bats). The adit is located about 500 m south of the proposed Mons Cupri disturbance footprint and is on the side of a hill facing south (away from the site).

BCE returned to the field 9 to 11 May 2021 to set 19 motion-sensitive cameras for 10 days in the DE and dispersed across the landscape in differing habitat types up to 8 km away for targeted searching of the Northern Quoll.

During the field visits in April and May 2021, BCE also conducted:

- identification of Vegetation and Substrate Associations (that provide fauna habitats)
- targeted searches for significant fauna and an assessment of their likelihood of occurrence based on VSAs present
- continuous recording of bird and reptile species encountered
- opportunistic fauna observations.

The cameras were collected on 20 May 2021 and the results are presented in BCE (2021). Northern Quoll were found to be widely dispersed across the landscape utilising different habitat types or VSAs. BCE concluded a 'few' individuals would be utilising the Mons Cupri ridgelines, and that there

is ample habitat outside the proposed disturbance footprint and DE for them to disperse e.g. the existing waste rock landform, adjacent ridges and creek lines. All impacts to fauna as a result of implementing the Mons Cupri expansion are expected to be minor.

BCE confirmed there were no survey limitations associated with either the Basic or Targeted surveys in accordance with *EPA 2020 Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment*.

### **3. ENVIRONMENTAL MANAGEMENT MEASURES AND REHABILITATION**

Environmental management measures that will be implemented to avoid, minimise and reduce the impacts associated with clearing up to 60 hectares for the Mons Cupri development include:

- Ground Disturbance Permit procedures will be implemented prior to clearing
- Northern Quoll trapping and relocation will be undertaken prior to clearing
- Utilise existing access tracks or other cleared areas to prevent unnecessary clearing
- Earthmoving equipment will be inspected for the presence of potential weed retaining soils and vegetation matter prior to the commencement of clearing works
- Areas designated for clearing will be surveyed and boundaries clearly demarcated. Operator personnel will be familiarised with demarcated areas prior to clearing works commencing to ensure no clearing beyond demarcated clearing zones
- Clearing will be undertaken progressively so only those areas absolutely required for operations are disturbed
- Vehicles and equipment will adhere to speed limits and avoid driving over, or parking on, vegetation and/or tree roots that is not designated for clearing
- Effective waste containment and disposal procedures will be implemented to prevent attraction of feral predators such as cats and foxes
- Induct and educate personnel on environmental requirements of the Project.

Rehabilitation of the Mons Cupri site will commence in accordance with the Mine Closure Plan approved under the *Mining Act 1978*. This will detail all closure practices and management measures as required. Broad closure objectives relevant to the mine include, but are not limited to:

- Progressive rehabilitation for disturbances not required for ongoing operations such as used borrow pits and redundant lay down areas
- Vegetation will be rehabilitated to meet agreed criteria prior to relinquishment
- Rehabilitation to support self-sustaining, functional ecosystems comprising suitable, local flora species as far as available resources and site conditions allow.



#### **4. SUMMARY OF ASSESSMENT AND CONCLUSION**

In summary, considering:

- a lack of threatened flora and vegetation communities in the DE
- minor impacts to conservation significant fauna and their habitat
- the proposed environmental management measures to be implemented to avoid, reduce and minimise impacts to the environment from clearing activities,

The disturbance of up to 60 ha of vegetation for the development of the Project is unlikely to have a significant effect on the environment.

## **5. REFERENCES**

Bamford Consulting Ecologists (2021). *Whim Creek Fauna Assessment*. Unpublished report for Tetris Environmental Pty Ltd.

Vicki Long and Associates (2021). *Whim Creek Copper-Zinc Project, Mine Expansion Mons Cupri, Desktop Review and Update of Vegetation and Flora Studies*. Unpublished report for Tetris Environmental Pty Ltd.

Department of Environmental Regulation (2014). *Guide to Assessment: Clearing of Native Vegetation under the Environmental Protection Act 1986*. Published document by DER for public guidance.