#### RECOMMENDED ENVIRONMENTAL CONDITIONS

# STATEMENT THAT A REVISED PROPOSAL MAY BE IMPLEMENTED (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

WEST ANGELAS IRON ORE PROJECT - REVISED PROPOSAL

**Proposal:** The Proposal is a revision of the existing West Angelas Iron Ore

Project, the subject of Ministerial Statement 970, dated 12 June 2014

and Ministerial Statement 1015, dated 21 August 2015.

The Proposal involves above and below water table, open-cut iron ore mining and the construction and operation of associated infrastructure at West Angelas, located approximately 130 kilometres west of Newman in the Pilbara region of Western Australia, as

documented in Schedule 1 of this Ministerial Statement.

**Proponent:** Robe River Mining Co. Pty. Ltd.

Australian Company Number 008 694 246

**Proponent Address:** 152-158 St Georges Terrace

PERTH WA 6000

GPO Box A42, PERTH WA 6001

Assessment Number: xxxx

Report of the Environmental Protection Authority: XXXX

Previous Report of the Environmental Protection Authority: 1914 and 2046

**Previous Ministerial Statement Number:** 970 and 1015

Pursuant to section 45, read with section 45B of the *Environmental Protection Act 1986*, it has been agreed that:

- 1. the Proposal described and documented in Schedule 1 of this Statement may be implemented; and
- from the date of this Statement, the implementation of the Proposal is subject to the following revised implementation conditions which replace and supersede all previous conditions of Ministerial Statements 970 and 1015.

#### 1 Proposal Implementation

1-1 When implementing the Proposal, the proponent shall not exceed the authorised extent of the Proposal as defined in Table 2 in Schedule 1 of this Statement, unless amendments to the Proposal and the authorised extent of the Proposal have been approved under the Environmental Protection Act 1986.

#### 2 Contact Details

2-1 The proponent shall notify the Chief Executive Officer (CEO) of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

# 3 Compliance Reporting

- 3-1 The proponent shall prepare, submit and maintain a Compliance Assessment Plan to the satisfaction of the CEO prior to the first Compliance Assessment Report required by condition 3-6, or as agreed in writing by the CEO.
- 3-2 The Compliance Assessment Plan shall indicate:
  - (1) the frequency of compliance reporting;
  - (2) the approach and timing of compliance assessment;
  - (3) the retention of compliance assessment;
  - (4) the method of reporting of potential non-compliance and corrective actions taken;
  - (5) the table of contents of Compliance Assessment Reports; and
  - (6) public availability of Compliance Assessment Reports.
- 3-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 3-2, the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.
- 3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.
- 3-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.
- 3-6 The proponent shall submit to the CEO the first Compliance Assessment Report by 30 April each year addressing compliance in the previous calendar year, or as agreed in writing by the CEO. The first Compliance Assessment Report shall be submitted by 30 April 2019 addressing the compliance for the period from the date of issue of this Statement, notwithstanding that the first reporting period may be less than 12 months.

The Compliance Assessment Report shall:

(1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;

- (2) include a statement as to whether the proponent has complied with the conditions;
- (3) identify all potential non-compliances and describe corrective and preventive actions taken;
- (4) be made publicly available in accordance with the approved Compliance Assessment Plan: and
- (5) indicate any proposed changes to the Compliance Assessment Plan required by condition 3-1.

#### 4 Public Availability of Data

- 4-1 Subject to condition 4-2, within a reasonable time period approved in writing by the CEO of the issue of this Statement and for the remainder of the life of the Proposal, the proponent shall make publicly available, in a manner approved in writing by the CEO, all validated environmental data (including sampling design, sampling methodologies, empirical data and derived information products e.g. maps) required under this Statement.
- 4-2 If any data referred to in condition 4-1 contains particulars of:
  - (1) a secret formula or process; or
  - (2) confidential commercially sensitive information

the proponent may submit a request for approval from the CEO to not make this data publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why the data should not be made publicly available.

### 5 Condition Environmental Management Plans

- 5-1 The proponent shall prepare and implement a Condition Environmental Management Plan to the satisfaction of the CEO. This plan shall demonstrate that the **environmental outcomes** specified in in condition 6-1, condition 7-1 and condition 8-1 will be met.
- 5-2 The Condition Environmental Management Plan shall:
  - (1) specify the **environmental outcomes** to be achieved, as specified in condition 5-1;
  - (2) specify **trigger criteria** that must provide an early warning that the threshold criteria may not be met;
  - (3) specify **threshold criteria** to demonstrate compliance with the environmental outcomes specified in condition 5-1. Exceedance of the threshold criteria represents non-compliance with these conditions;
  - (4) specify **monitoring** to determine if trigger criteria and threshold criteria are exceeded;
  - (5) specify **trigger level actions** to be implemented in the event that trigger criteria have been exceeded;
  - (6) specify **threshold contingency actions** to be implemented in the event that threshold criteria are exceeded; and
  - (7) provide the format and timing for the reporting of monitoring results against trigger criteria and threshold criteria to demonstrate that condition 5-1 has been met over the reporting period in the Compliance Assessment Report required by condition 3-6.

- After receiving notice in writing from the CEO that the Condition Environmental Management Plan satisfies the requirements of condition 5-2 the proponent shall:
  - (1) implement the Condition Environmental Management Plan, or any subsequent approved versions; and
  - (2) continue to implement the Condition Environmental Management Plan until the CEO has confirmed by notice in writing that the proponent has demonstrated the objectives specified in condition 5-1 have been met.
- In the event that the monitoring indicates an exceedance of the threshold criteria specified in the Condition Environmental Management Plans, the proponent shall:
  - (1) report the exceedance in writing to the CEO within seven (7) days of the exceedance being identified;
  - (2) implement the threshold level contingency actions specified in the Condition Environmental Management Plans within 24 hours and continue implementation of those actions until the CEO has confirmed by notice in writing that it has been demonstrated that the threshold criteria are being met and the implementation of the threshold contingency actions is no longer required;
  - (3) investigate to determine the cause of the threshold criteria being exceeded;
  - (4) investigate to provide information for the CEO to determine potential environmental harm that occurred due to the threshold criteria being exceeded; and
  - (5) provide a report to the CEO within twenty one (21) days of the exceedance being reported as required by condition 5-6(1). The report shall include;
    - a. details of threshold contingency actions implemented;
    - b. the effectiveness of the threshold contingency actions implemented, against the threshold criteria;
    - c. the findings of the investigations required by condition 5-5(3) and 5-5(4);
    - d. measures to prevent the threshold criteria being exceeded in the future;
    - e. measures to prevent, control or abate the environmental harm which may have occurred; and
    - f. justification of the threshold remaining, or being adjusted based on better understanding, demonstrating that outcomes would continue to be met.

#### 5-5 The proponent:

- (1) may review and revise the Condition Environmental Management Plan, or
- (2) shall review and revise the Condition Environmental Management Plan as and when directed by the CEO.
- 6 Hydrological Processes and Flora and Vegetation Dewatering, discharge and riparian vegetation
- 6-1 The proponent shall manage the implementation of the Proposal to meet the following environmental outcomes:

- (1) The proponent shall ensure that there is no irreversible impact, as a result of the proponent's dewatering activities, to groundwater dependant vegetation within Karijini National Park, as delineated in Figure 6 of Schedule 1 and defined by the geographic coordinates in Schedule 2.
- (2) The proponent shall ensure that there is no irreversible impact, as a result of the proponent's discharge of surplus water, to the health of riparian vegetation of Turee Creek East.

# 7 Flora and Vegetation – Conservation significant vegetation communities; West Angelas Cracking Clay Priority Ecological Communities

- 7-1 The proponent shall manage the implementation of the Proposal to meet the following environmental outcomes:
  - (1) The proponent shall ensure that there is no disturbance to the West Angelas Cracking Clay Priority Ecological Community (PEC-2015-5) as delineated in Figure 4 of Schedule 1 and defined by the geographic coordinates in Schedule 2,
  - (2) The proponent shall ensure no more than 20 ha of disturbance to other representations of the West Angelas Cracking Clay Priority Ecological Community that are not authorised to be cleared in Schedule 1.

## 8 Terrestrial Fauna – Conservation significant fauna species; Ghost bat (Macroderma gigas)

- 8-1 The proponent shall manage the implementation of the Proposal to meet the following environmental outcomes:
  - (1) The proponent shall ensure that there is no disturbance to the Ghost Bat roost; Cave AA1 as delineated in Figure 5 of Schedule 1 and defined by the geographic coordinates in Schedule 2.
  - (2) The proponent shall minimise disturbance to other Ghost Bat roosts; Caves A1, A2, L2 and L3 as delineated in Figure 5 of Schedule 1 and defined by the geographic coordinates in Schedule 2.
- 8-2 The proponent shall avoid the use of barbed wire in the Proposal area except where there is a statutory requirement to do so, and where avoidance is not possible, minimise the impact of barbed wire on Ghost bats.

#### 9 Closure

- 9-1 The proponent shall manage the implementation of the Proposal to meet the following environmental objective:
  - (1) 'ensure that the Proposal is rehabilitated and decommissioned in an ecologically sustainable manner'.
- 9-2 Within 12 months of the issue of this Statement the proponent shall prepare and submit a Mine Closure Plan in accordance with the *Guidelines for Preparing Mine Closure Plans*, May 2015, (or any subsequent revisions of the guidelines), to the requirements of the CEO, on advice of the Department of Mines and Petroleum.

- 9-3 The proponent shall review and revise the Mine Closure Plan required by condition 9-2 at intervals not exceeding three years, or as otherwise specified by the CEO, and submit the plan to the CEO at the agreed interval.
- 9-4 The proponent shall implement the latest revision of the Mine Closure Plan, which the CEO has confirmed by notice in writing, satisfies the requirements of condition 9-2.

#### 10 Offsets

- 10-1 In view of the residual impacts and risks as a result of implementation of the Proposal, the proponent shall contribute funds to offset clearing of 'good to excellent' condition native vegetation, including the loss of habitat for conservation significant species, in the Hamersley IBRA subregion, and calculated pursuant to condition 10-2. This funding shall be provided to a government-established conservation offset fund or an alternative offset arrangement providing an equivalent outcome as determined by the Minister.
- The 4,667 ha of clearing of native vegetation previously approved under Ministerial Statement 970 is exempt from the requirement to offset under condition 10-1.
- 10-3 The proponent's contribution to the initiative identified in condition 10-1 shall be paid biennially, the first payment due two years after commencement of the additional ground disturbance defined in Table 2 of Schedule 1. The amount of funding would be made on the following basis and in accordance with the approved Impact Reconciliation Procedure required by condition 10-5:
  - (1) \$750 AUD (excluding GST) per hectare of 'Good to Excellent' condition vegetation cleared within the West Angelas Mine Development Envelope (delineated in Figure 2 and defined by the geographic coordinates in Schedule 2) within the Hamersley IBRA subregion; and
  - (2) \$1500 AUD (excluding GST) per hectare of conservation significant vegetation; West Angelas Cracking Clay Priority Ecological Community cleared within the West Angelas Mine Development Envelope (delineated in Figure 5 and defined by the geographic coordinates in Schedule 2) within the Hamersley IBRA subregion;
  - (3) \$1500 AUD (excluding GST) per hectare of conservation significant vegetation; riparian vegetation communities within Turee Creek East affected by discharge (delineated in Figure 5 and defined by the geographic coordinates in Schedule 2).
  - (4) \$50,000 AUD (excluding GST) per hectare of potentially groundwater dependant vegetation within Karijini National Park affected by dewatering (delineated in Figure 5 and defined by the geographic coordinates in Schedule 2).
- 10-4 The proponent shall prepare and submit an Impact Reconciliation Procedure to the satisfaction of the CEO within six months of the date of this Statement, or as approved by the CEO.
- 10-5 The Impact Reconciliation Procedure required pursuant to condition 10-4 shall:
  - (1) include a methodology to identify clearing of 'good to excellent' condition native vegetation in the Hamersley IBRA subregion;
  - (2) include a methodology for calculating the amount of clearing undertaken during each biennial time period; and

- (3) state dates for the commencement of the biennial time period and for the submission of results of the Impact Reconciliation Procedure, to the satisfaction of the CEO.
- 10-6 The real value of contributions described in condition 10-2 will be maintained through indexation to the Perth Consumer Price Index (CPI), with the first adjustment to be applied to the first contribution.

**Table 1: Summary of the Proposal** 

Proposal title	West Angelas Iron Ore Project
Short description	The Proposal is located approximately 130 kilometres west of Newman in the Pilbara region of Western Australia (Figure 1). The Proposal involves above and below water table, open-cut iron ore mining and the construction and operation of associated infrastructure including but not limited to the following: a 413 km railway network from West Angelas to port facilities located at Cape Lambert with a spur loop at West Angelas and sidings (including but not limited to: Juna Downs, Rosella, Bellbird, Brockman Refuge and Emu); dewatering and surplus water management infrastructure; surface water management infrastructure; linear infrastructure; processing and support facilities.
	The Turee Creek B Borefield, located approximately 30 km west of the mine site supplies potable water to mine and camp facilities and, when required, for operational purposes. Mine dewatering, which dewaters the ore bodies to allow below water table mining, supplies water for operational purposes. Surplus dewatering water, exceeding the operational requirement, is discharged to the environment.  The mine and associated infrastructure described above will be contained within the
	West Angelas Mine and Linear Infrastructure Development Envelopes (Figure 2 and Figure 3). Disturbance within the Development Envelopes will not exceed those values indicated in Table 2.

Table 2: Location and authorised extent of physical and operational elements of the Proposal

Element	Location	Authorised Extent
Mine and associated infrastructure	Figure 2, Figure 4, Figure 5 and geographic coordinates in Schedule 2	<ul> <li>Clearing of no more than 12,200 hectares (ha) within a 26,700 ha Mine Development Envelope, including:</li> <li>No clearing within the Ghost Bat Cave AA1 Exclusion Zone.</li> <li>No clearing within the West Angelas Cracking Clay Priority Ecological Community, PEC-2015-5.</li> <li>No more than 20 ha of other representations of the West Angelas Cracking Clay Priority Ecological Community.</li> <li>Below water table pits are to be backfilled to a level to prevent the</li> </ul>
Linear infrastructure	Figure 3	A 413 km rail network transports processed ore from West Angelas to port facilities located at Cape Lambert.  Clearing no more than 1,500 ha within a 19,400 ha Linear Infrastructure Development Envelope, including:  Five existing sidings; Spoonbill, Bellbird, Rosella, Brockman Refuge and Emu and potential additional sidings to support the rail network.  Turee Creek B borefield, pipeline, powerline, access roads and other associated infrastructure.

Surplus water management	Figure 6 and geographic coordinates in Schedule 2	Dewatering water will be used onsite in the first instance to supply water for operational purposes. Surplus dewatering water, exceeding the operational requirement, is discharged to a local ephemeral tributary of Turee Creek East. The surface discharge extent will not extend within the boundary of Karijini National Park.
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**Table 3: Abbreviations and Definitions** 

Acronym or Abbreviation	Definition or Term	
AUD	Australian dollar	
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act</i> 1986, or his delegate.	
Clearing	As defined in the Environmental Protection Act 1986.	
Conservation significant fauna	Any terrestrial fauna species listed under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 or the Western Australia Wildlife Conservation Act 1950	
Conservation significant flora	Any flora species listed under the Commonwealth <i>Environmental Protection and Biodiversity Conservation Act 1999</i> or the Western Australia <i>Wildlife Conservation Act 1950</i> or are considered by Parks and Wildlife to be Priority Species.	
СРІ	Consumer Price Index	
EPA	Environmental Protection Authority	
GL/a	Gigalitres per annum	
ha	Hectare	
km	Kilometre	
ОЕРА	Office of the Environmental Protection Authority	
Wetting front	The extent of the surface expression of water from surplus water discharge under natural no-flow conditions.	

# Figures (attached)

- Figure 1 Regional Setting
- Figure 2 West Angelas Iron Ore Project Mine Development Envelope and indicative layout
- Figure 3 West Angelas Iron Ore Project Linear Infrastructure Development Envelope
- Figure 4 Conservation significant vegetation communities, subject to offsets
- Figure 5 Ghost bat (*Macroderma gigas*) roosts
- Figure 6 Surplus dewatering water surface discharge extent

# **Geographic spatial data coordinates**

Coordinates defining the following are held by the Office of the Environmental Protection Authority:

- 1. Mine and Linear Infrastructure Development Envelopes
- 2. Ghost Bat Cave AA1 Exclusion Zone
- 3. Indicative layout (pits, waste dumps and stockpiles)
- 4. Conservation significant vegetation communities, subject to offsets (West Angelas Cacking Clay PEC and riparian vegetation)
- 5. Ghost bat (Macroderma gigas) roosts
- 6. Surplus dewatering water surface discharge extent











