



Ass # 995

Bull # 812

State # 415

MINISTER FOR THE ENVIRONMENT WESTER

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**MT KEITH NICKEL PROJECT: TAILINGS STORAGE UPGRADE
400 KM NORTH OF KALGOORLIE (995)**

WESTERN MINING CORPORATION LIMITED

This proposal may be implemented subject to the following conditions:

1 Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal, the proponent shall fulfil the commitments made in the Consultative Environmental Review and in response to issues raised following public submissions; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

The environmental management commitments (January 1996) were published in Environmental Protection Authority Bulletin 812 (Appendix 6) and a copy is attached.

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal.
- 2-2 Where, in the course of the detailed implementation referred to in condition 2-1, the proponent seeks to change the designs, specifications, plans or other technical material submitted to the Environmental Protection Authority in any way that the Minister for the Environment determines, on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

Published on

- 8 MAY 1996

3 Proponent

These conditions legally apply to the nominated proponent.

- 3-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

4 Decommissioning

The satisfactory decommissioning of the project, removal of the plant and installations and rehabilitation of the site and its environs to a sustainable condition in the long term, is the responsibility of the proponent.

- 4-1 Within five years following commissioning of the tailings storage facility, or at such later time considered appropriate by the Minister for the Environment on advice of the Department of Environmental Protection, the proponent shall prepare a plan which:

- 1 describes the process for decommissioning and rehabilitation of the project area;
- 2 provides for the long term management of ground and surface water systems affected by the tailings disposal area; and
- 3 provides for the development of a "walk away" solution for the decommissioned tailings storage facility,

to the requirements of the Environmental Protection Authority on advice of Department of Environmental Protection, the Department of Minerals and Energy and the Water and Rivers Commission.

Note: A "walk away" solution means that the site shall either no longer require management at the time the proponent ceases discharge operations, or if further management is deemed necessary, the proponent shall make adequate provision so that the required management is undertaken with no liability to the State.

- 4-2 The proponent shall implement the plan required by condition 4-1 to the requirements of the Environmental Protection Authority on advice of the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Environmental Protection.

5 Reporting

- 5-1 Within five years following the commencement of the operation of the tailings storage facility, the proponent shall submit a report which includes, but is not necessarily limited to the following:

- 1 a description of the development of the tailings storage facility;
- 2 details of the operation of the facility and issues arising from and variations required to its operation; and
- 3 monitoring results,

to the requirements of the Environmental Protection Authority.

The reporting required by this condition shall be repeated thereafter at five-yearly intervals to the requirements of the Minister for the Environment.

Note: The Environmental Protection Authority will subsequently advise the Minister for the Environment on the need for further five-yearly reports.

6 Time Limit on Approval

The environmental approval for the proposal is limited.

- 6-1 If the proponent has not substantially commenced the project within five years of the date of this statement, then the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced.

Any application to extend the period of five years referred to in this condition shall be made before the expiration of that period to the Minister for the Environment.

Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years.

7 Compliance Auditing

To help determine environmental performance and compliance with the conditions, periodic reports on the implementation of the proposal are required.

- 7-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

Procedure

- 1 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions contained in this statement and for issuing formal clearance of conditions.
- 2 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

Note

The proponent is required to apply for a Works Approval for this project under the provisions of Part V of the Environmental Protection Act.

Hon Peter Foss QC MLC
MINISTER FOR THE ENVIRONMENT

= 7 MAY 1998

Proponent's Environmental Management Commitments

January 1996

**MT KEITH NICKEL PROJECT:
TAILINGS STORAGE UPGRADE
400 KM NORTH OF KALGOORLIE (995)**

WESTERN MINING CORPORATION LIMITED

Summary of Environmental Commitments

Issue	Objective	Commitments	Timing	Whose requirements	Specification
Security of remnant vegetation/land systems of region	Protect the ecological values of affected land systems and associated vegetation, habitats and fauna	1. Minimise clearing of vegetation and rehabilitate areas no longer required for operations	Pre- and post-construction	DME, DEP	Compliance with tenement conditions
		2. Contribute to co-ordinated management in north-eastern Goldfields with other land users	Ongoing	CALM, WADA	Consultation ongoing
		3. Manage surface drainage and groundwater quality, to minimise impact on Wanjarri Nature Reserve	Ongoing	CALM	Minimal impacts on Wanjarri
Protect or enhance conservation values of Wanjarri Nature Reserve	Protect the ecological values of Wanjarri Nature Reserve from direct and indirect disturbance	4. Contribute to management of Wanjarri Nature Reserve, in accordance with existing Memorandum of Understanding with CALM	Ongoing	Signatories of the Memorandum of Understanding	Improved management of Wanjarri Nature Reserve
		5. Design and construct TSF to most stringent guidelines from DME.	Construction	DME	DME guidelines
Groundwater resource	Protect the water quality and long term yield of superficial and palaeochannel aquifers	6. Manage TSF to minimise risk of seepage	During operation	WRC and DEP	Comply with ANZECC Guidelines for Groundwater Protection in Australia
		7. Implement monitoring programme to detect and monitor saline seepage out of TSF. If seepage is detected, formulate response plan	During and after construction	WRC and DEP	No change to existing and future beneficial uses
Surface drainage	Maintain as far as possible the pre-existing flow patterns, and protect downstream vegetation from the effects of saline runoff.	8. Design stormwater diversion drains to replicate as closely as possible the natural drainage patterns downstream of the TSF	Before and during construction, and ongoing	WRC	Minimal impact on vegetation and soil structure as indicated by vegetation and erosion monitoring
		9. Implement a soil erosion monitoring programme. Should accelerated soil erosion be detected as a result of TSF, implement a remediation programme.	Ongoing	DME (reported in annual environmental report)	Erosion minimised in comparison with control plots
		10. Implement a vegetation monitoring programme. Should changes in vegetation be detected as a result of the TSF, implement a remediation programme	Ongoing	CALM and DEP	Downstream net vegetation loss minimised in comparison with upstream monitoring plots

Issue	Objective	Commitments	Timing	Whose requirements	Specification
Implement an Environmental Management System	Develop an Environmental Management System (EMS) to ensure sound management of TSF and environment	11. Identify and implement an EMS. Update existing Environmental Management Programme (EMP) to include matters relevant to the TSF	EMP updated within 12 months. EMS implementation ongoing	In accord with Australian Standards including independent auditing	Compliance with intent of Interim Australian Standards 14001 and 14004
Site selection process	Select most appropriate site on environmental criteria	12. Siting will take into account all environmental aspects including hydrology, hydrogeology and significant features	Preconstruction		No impact on ecologically significant areas or restricted habitats
Plants and animals	Protect rare and priority species	13. Assess TSF site for Declared Rare Flora and priority listed species	Preconstruction	CALM	Compliance with Conservation and Land Management Act 1984.
		14. Conduct trapping programme over TSF for mulgara. If any are trapped, implement relocation programme	Preconstruction	CALM	Successful relocation of mulgara, if present
		15. Fund and conduct long term research into distribution and ecology of mulgara in north-eastern Goldfields	Ongoing	CALM	Improved understanding of mulgara ecology
Rehabilitation	Provide stable landforms and self-sustaining vegetation cover through progressive and final long term rehabilitation.	16. Prepare draft rehabilitation programme, updated as required to reflect results of rehabilitation trials and advances in knowledge of rehabilitation techniques. Submit final rehabilitation plan prior to implementation	Draft rehabilitation plan within two years. Updates and trials ongoing.	DEP, CALM and DME	Stable, non-polluting aesthetically acceptable landform.
Ensure integrity of facility to extreme events	Design and construct safe facility	17. Design and construct TSF in accordance with most stringent geotechnical guidelines	Design stage and during construction	DME	Compliance with DME Guidelines for Tailings Storage Facilities
Other	Avoid disturbance to Aboriginal heritage sites	18. No Aboriginal heritage sites will be disturbed without permission from the Minister for Aboriginal Affairs. If any previously unrecorded sites are found, all work in immediate vicinity will cease and appropriate procedures adopted	Ongoing	Dept of Aboriginal Affairs	Compliance with Aboriginal Heritage Act 1972.
	Minimise dust	19. Minimise clearing and stripping and implement dust control strategies during construction. Establish vegetation cover on topsoil piles and perimeter walls.	During construction and ongoing	DEP and DME	Compliance with Environmental Protection Act 1987 Licence conditions, and Mines Safety and Inspection Act

REGULATORY AUTHORITIES

WADA Department of Agriculture

DME Department of Minerals and Energy

CALM Department of Conservation and Land Management

WRC

DEP

Water and Rivers Commission

Department of Environmental Protection

Attachment 1 to Ministerial Statement 415

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment is to be included as a new Schedule 1 of Ministerial Statement 415

Proposal: Mt Keith Nickel Project: Tailings Storage Upgrade 430 km north of Kalgoorlie

Proponent: BHP Billiton Nickel West Pty Ltd

Changes:

- Proposal short description included within Table 1
- Proposal physical and operational elements included within Table 2.
- Increase in tailings storage capacity element from 240Mt to 492 Mt
- Figures 1 and 2 added to Ministerial Statement 415
- Development Envelope delineated within Figure 2

Table 1: Summary of the Proposal

Proposal Title	Mt Keith Nickel Project: Tailings Storage Upgrade 430 km north of Kalgoorlie
Short Description	The proposal is to develop a central discharge tailings storage facility consisting of a containment embankment to carry a ring main distribution pipe which would feed vertical risers located within the storage facility. A gradual lift in tailings height will be undertaken, rising by approximately 1 m to 1.5 m per year to store tailings discharged through risers from the processing plant at the adjacent Mt Keith nickel mine.

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

Element	Location	Previously Authorised Extent	Authorised Extent
Tailings Storage Capacity	Figure 2	Disposal of approximately 240 Mt of tailings	Disposal of approximately 492 Mt of tailings
Height of Tailings Facility	Figure 2	45m	No Change
Average Slope Angle	Figure 2	Year 1 to 2: 1.5 to 2% Year 2 to 3: 2 to 2.5% Year 4 onwards: 2.5 – 3%	Up to 3%

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
m	Metres
Mt	Million tonnes
ha	hectare
km	kilometre

Figures (attached)

Figure 1 Mt Keith Central Discharge Tailing Storage Facility - Regional Location

Figure 2 Proposal Development Envelope

[Signed 14 October 2019]

Dr Tom Hatton

CHAIRMAN

Environmental Protection Authority
under delegated authority

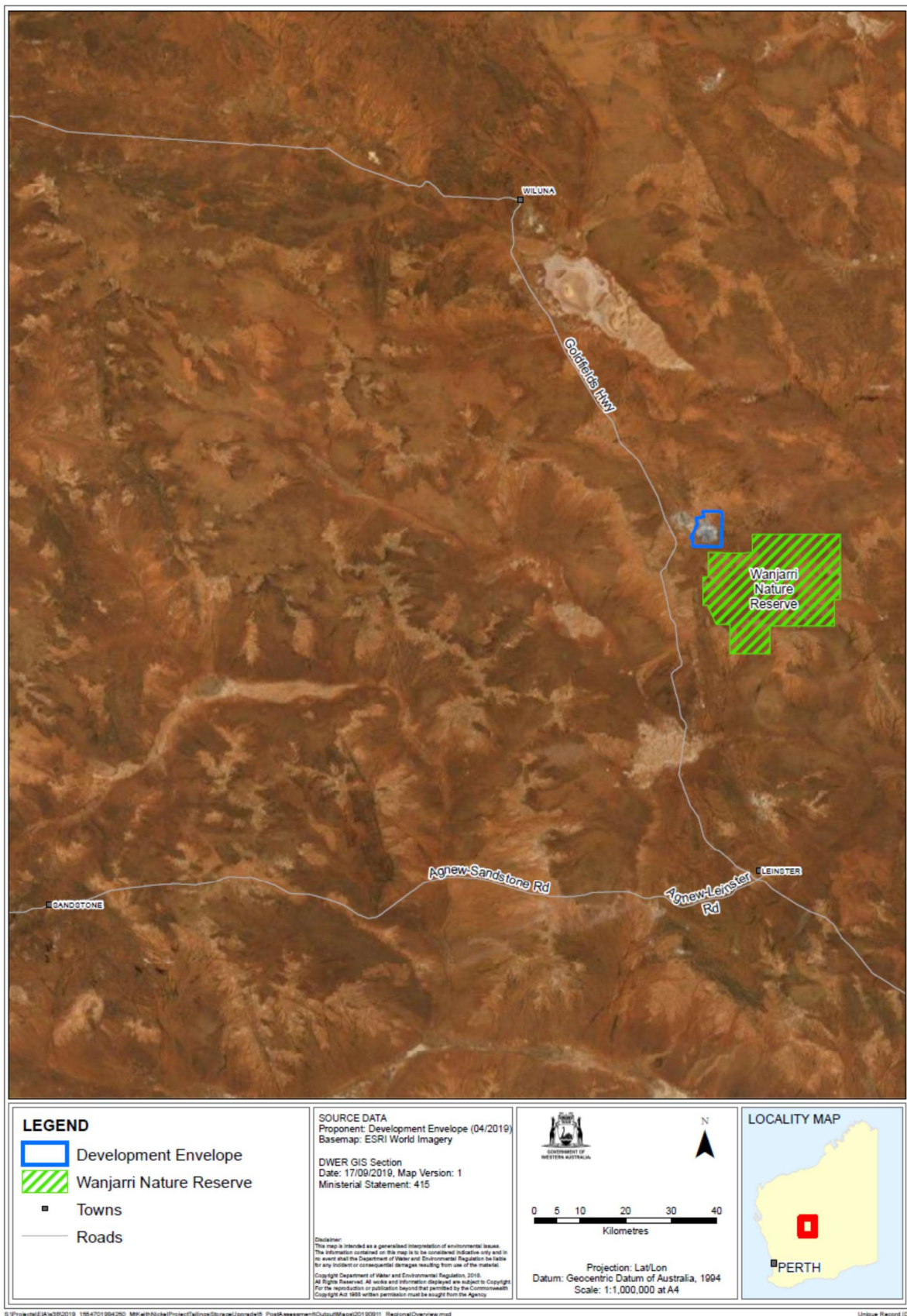


Figure 1: Mt Keith Central Discharge Tailing Storage Facility - Regional Location



Figure 2: Proposal Development Envelope