



**AUSTRALIAN
ZIRCONIA LTD**

(A wholly owned subsidiary of Alkane Resources Ltd)

Dubbo Zirconia Project Environmental Impact Statement

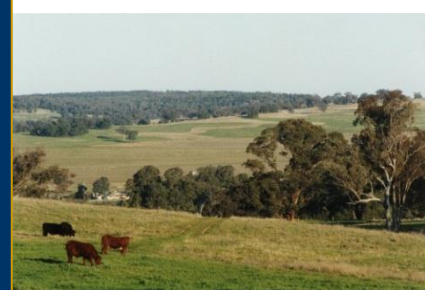
Development Application SSD 5251

September 2013

Prepared by:



R.W. CORKERY & CO. PTY. LIMITED



Description of Photos

Photo 1*	Dubbo Zirconia Project (DZP) Demonstration Pilot Plant at ANSTO Minerals, Lucas Heights.
Photo 2*	Wambangalang Creek and railway bridge.
Photo 3*	Electromagnetic survey of Dubbo Zirconia Project soils.
Photo 4#	Toongi Hall and tennis courts.
Photo 5*	Toongi ore body bulk sample operation.
Photo 6*	Toongi Valley rural scene.
Source: * Australian Zirconia Ltd # R.W. Corkery & Co. Pty Limited – Ref: E545B_002	



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Dubbo Zirconia Project

Environmental Impact Statement

Prepared for:

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Ref No. 545/04

September 2013



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Author's Certification

for the submission of an Environmental Impact Statement prepared in accordance with Schedule 2, Part 3 of the *Environmental Planning and Assessment Regulation 2000* and the *Environmental Planning and Assessment Act 1979*.

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(b) Development application by:

applicant name: Australian Zirconia Limited
applicant address: 65 Burswood Road
BURSWOOD WA 6100

(c) Application Number: SSD 5251

(d) Address/land details:

Area of Activities	Land Title Reference
DZP Site	Part Lot 311 DP595631, Lot 271 DP593668, Part Lot 35 DP753220, Part Lot 1 DP133581, Part Lot 18 DP753252, Lot A & B DP439352, Lot 19 DP 753252, Part Lot A DP391069, Lot 55 DP 753252, Lot B DP 391069, Lot X DP 405495, Lot 211 DP595631, Lot 1 DP818802, Lot 50 DP 753252, Lot 7300 DP1149010 (Licensed for grazing), Unformed 'Paper' Road (Crown Land) separating Lot 311 DP55631 and Lots A & B DP439352, Unformed 'Paper' Road (Dubbo City Council) separating Lot 1 DP818802 and Lot 7300 DP 1149010
Macquarie River Water Pipeline	Lot 311 DP595631, Lot 27 DP753220, Lot 62-63 DP753220, Lot 30 DP753220, Lot 1-4 DP753226, Various public road reserves

(e) Project Outline:

The Dubbo Zirconia Project would comprise a small scale open cut mine supplying ore containing rare metals and rare earth elements to a processing plant near the village of Toongi, approximately 25km south of Dubbo. The location of the proposed open cut, processing plant and associated facilities for the management of waste generated by these activities is collectively referred to as the DZP Site and comprises an area of 2 507ha. Total disturbance associated with the proposal is approximately 808ha, only 71ha of which (<8%) occurs on remnant native vegetation (a further 414ha occurs over 'derived grasslands' which are rotationally cropped). An area of 1 021ha has been set-aside for the establishment of a Biodiversity Offset Area to compensate for the disturbance to remnant vegetation and threatened biota. Annual ore production would be approximately one million tonnes per year which would generate approximately 75 000t of products for a period of 20 years.

The proposal would also involve establishment of infrastructure external to the DZP Site in the form of a water pipeline to the Macquarie River, rail line upgrade between Toongi and Dubbo, gas pipeline installation within the rail corridor and road upgrades of Obley and Toongi Roads (between the DZP Site and the Newell Highway).

(f) Assessment of Environmental Impact:

The assessment of environmental impacts of this project includes the matters referred to in the Director-General's Requirements provided to the Applicant on 4 May 2012, and supplementary Director-General's Requirements provided to the Applicant on 1 March 2013, under Schedule 2, Part 2 of the *Environmental Planning and Assessment Regulation 2000*.

(g) Declaration:

I, Alex Luke Irwin, hereby declare that I have overseen the preparation of the contents of this assessment and to the best of my knowledge:

- it has addressed the Director-General's Requirements as provided by the Department on 4 May 2012 and 1 March 2013;
- the assessment contains all available information that is relevant to the environmental assessment of the project; and
- the information contained in this document is neither false nor misleading.

Signature: 

Name: Alex L. Irwin

Date: 12/9/2013

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		Part 2: Air Quality and Greenhouse Gas Assessment <i>Pacific Environment Limited</i>
		Part 3: Radiation Assessment <i>JRHC Enterprises Pty Ltd</i>
		Part 4: Surface Water Assessment <i>Strategic Environmental and Engineering Consulting Pty Ltd</i>
		Part 5: Groundwater Assessment <i>Environmental Earth Sciences</i>
		Volume 2:
		Part 6: Terrestrial Ecology Assessment <i>Ozark Environmental and Heritage Management Pty Ltd</i>
		Part 7: Aquatic Ecology Assessment <i>Alison Hunt and Associates Pty Ltd</i>
		Volume 3:
		Part 8: Aboriginal Heritage Assessment <i>Ozark Environmental and Heritage Management Pty Ltd</i>
		Part 9: Historic Heritage Assessment <i>Ozark Environmental and Heritage Management Pty Ltd</i>
		Part 10: Soils and Land Capability Assessment <i>Sustainable Soils Management Pty Ltd</i>
		Part 11: Traffic Impact Assessment <i>Constructive Solutions Pty Ltd</i>
		Part 12: Socio-Economic Impact Assessment <i>Diana Gibbs and Partners</i>

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