

3 May 2010

Reference No. 107643126-001-L-Rev0

Colleen Murphy
Serpentine Jarrahdale Shire
6 Paterson Street
MUNDIJONG WA 6132

SOCIAL IMPACT ASSESSMENT REVIEW, KEYSBROOK MINERAL SANDS PROJECT

Dear Colleen

Golder Associates Pty Ltd (Golder) was commissioned by the Serpentine Jarrahdale Shire (the 'Shire') to undertake a social impact assessment (SIA) review of the proposed Keysbrook Mineral Sands project (the 'project') as part of the Shire's planning process. The Shire's SIA review objectives were to undertake review and gap analysis of key reports and management plans submitted in support of the project proposal. This letter provides a summary of the review findings against legislative and local planning guidance and provides comment on possible areas for more information.

1.0 SCOPE OF WORK

Golder's scope of works included:

- Outline SIA legislative requirements and standards as related to the mineral sands extractive industry;
- Review background documentation for compliance with reviewed legislative requirements and standards, as provided by the Shire to Golder, including:
 - Keysbrook Mineral Sand Project, Keysbrook, WA: Public Environmental Review, July 2006, Olympia Resources Limited;
 - Keysbrook Mineral Sand Project, Keysbrook, WA: Public Environmental Review Response to Submissions, June 2007, Olympia Resources Limited; and
 - Application for approval to commence development, received 8 February 2010, and related appendices, Matilda Zircon Ltd;
- Review proposal's social aspects against *Local Planning Policy 30: Mineral Sands Extraction*; and
- Prepare a summary report outlining key findings.

Golder Associates' review undertook a comparative evaluation of existing project documentation, as provided by the Shire, against general legislative standards for social impact assessment (SIA). The key elements comprising this review were socio-economic impacts, including economic, social well being and heritage, and stakeholder consultation. Peer review of the health impact assessment is being undertaken separately to this review. Transport assessment was not considered to be part of this review.

It should be noted that SIA requirements are not a prescriptive or highly regulated process in WA. There is not a mandatory requirement for socio-economic assessment. There is general recognition of the importance of consultation; however, actual outcomes and approaches to consultation are not prescribed. In general



other State or national standards for mineral sands projects which prescribe or outline SIA requirements (socio-economic or consultation) do not currently exist.

2.0 BACKGROUND

The Keysbrook Mineral Sands Extraction project was proposed by Olympia Resources Limited (Olympia) in July 2006. The proposed project had an expected life of eight years and covered a mine area of 1,366 hectares, which overlapped the Shires of Serpentine Jarrahdale and Murray (EPA, 2007). The project was assessed under Part IV of the WA *Environment Protection Act 1986* (EP Act), and a Public Environmental Review (PER) was completed in July 2006. The project was designated to be a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The PER was assessed by the EPA in accordance with the bilateral agreement between Commonwealth and WA under the EPBC Act.

Based on the PER (2006), the Matilda Zircon Ltd development application (DA) was submitted in February 2010 to the Shire for approval under clause 5.1.1 of Town Planning Scheme 2 (TPS2). The application is for heavy mineral sand extraction and preliminary screening within the Shire. The DA applies to the Serpentine Jarrahdale Shire activities only, and refers to separate approval being sought from the Shire of Murray for primary processing (unless an amended planning approval is obtained from the Serpentine Jarrahdale Shire to locate the processing plant within the Shire). The proposed development (Olympia, 2006) was approved under the EP Act in October 2009 (Ministerial Statement 810). The determination under Part 9 of the EPBC Act will be made by EPA Bulletin 1269, relating to the Olympia application. The proponent will apply for an extractive industry licence under the Shire Extractive Industries Local Law.

The Matilda Zircon Ltd DA describes a project area of 942 hectares with an extraction area of 401 hectares, or 42% of the subject site. The expected project timeline is 10 years. The existing landscape is predominantly used for grazing and broad acre farming. Areas of significant vegetation within the landscape will be retained. Short-term impacts from mining operations are localised, with the majority of the subject site expected to appear as grazing pasture at any one time during operations, due to a prescribed 30 hectare limit for active mine excavation. The rehabilitation plan's intent is to return the entire site to agricultural land use, with a predicted landscape quality higher than currently exists. Mining operations will be visible from some locations during the project: South Western Highway; Escarpment; Internal road network; and Keysbrook Town Site (Matilda, 2010).

3.0 LEGISLATIVE STANDARDS AND REQUIREMENTS

The following provides a summary of key social review comments and provides possible items for further information or action as compared to the EP Act and Local Planning Policy No. 30.

3.1 Environment Protection Act 1986 and Heritage

The main piece of relevant development legislation is the WA EP Act. Under the Act and related guidelines (EPA, 2009) there is minimal guidance relating to social impact including socio-economic impact assessment. The main SIA requirements are to demonstrate consultation with interested members:

- The environmental review's objective is to communicate clearly with stakeholders (including the public and government agencies), so that the EPA can obtain informed comment to assist in providing advice to government
- The EPA expects the proponent to fully consult with interested members of the public and take due care in ensuring all other key environmental factors, which may be of interest to the public, are addressed.
- A description of the public participation and consultation activities undertaken by the proponent in preparing the review. It should describe the activities undertaken, the dates, the groups/individuals involved and the objectives of the activities. Cross-reference should be made with the description of environmental management of the factors which should clearly indicate how community concerns have been addressed. Those concerns which are dealt with outside the EPA process can be noted and referenced.

The EPA's draft guidelines for community consultation were released in 2003, and have not been finalised or endorsed since this time. The guidelines outline the benefits of involving community and provide advice on

designing and implementing stakeholder engagement plans. Implementation of the guidelines is not a mandatory requirement for new projects.

The WA *Aboriginal Heritage Act 1972* provides for the protection and preservation of Aboriginal sites including any sacred, ritual or ceremonial site, or objects. Permission is required to disturb known heritage sites, and it is an offence to destroy, damage or conceal identified sites. The *Heritage of Western Australia Act 1990* provides for the conservation of cultural heritage sites within WA.

3.2 Shire Planning Policy No. 30

The Shire Planning Policy No. 30¹ (the 'Policy') which came into effect 22 February 2010 establishes the policy framework for assessment of mineral sands extraction processes under Town Planning Scheme No. 2 (TPS2) and/or the Metropolitan Region Scheme. The application of the Policy to mineral sands projects is new and Shire assessment requirements or pro formas against the policy were not provided to Golder as part of this review.

Appendix B of the Policy outlines the matters required to be addressed by proponents in making development planning applications, and where mineral sands applications will not be determined by the Shire, it will serve as a statutory reference document to guide Shire decision making processes. The Policy's intent is to ensure mineral sands applications demonstrate a commitment to achieving social, economic and environmental benefits in the short, medium and long term. The Policy includes the following key social impact assessment matters:

- Community (Items 34-40): potential impacts to community services, recreation access, housing, land access, land and transport planning, urban design, community wellbeing, and commercial area;
- Employment Opportunities (Items 41-45): number, duration, type of employment opportunities, local labour and diversity opportunities;
- Sensory Receptors (Items 54-56): potential exposure of residents / visitors / employees to dust, noise, amenity and lifestyle opportunities;
- Amenity (Item 63): potential impacts on amenity and lifestyle opportunities for existing and future residents/ visitors;
- Economic Impacts (Items 64-69): local employment, agricultural land resource protection from inappropriate uses, impacts on future land use feasibility, tourism, impacts on diversity of local and regional economic base; and
- Infrastructure provision (Items 77-78): the potential impact on domestic and regional infrastructure.

4.0 KEY FINDINGS

The following provides a summary of key social review comments and provides possible items for further information or action as compared to the EP Act and Local Planning Policy No. 30.

4.1 EP Act and Heritage

The PER (2006) does not provide a socio-economic impact assessment; however, it provides a consultation summary and a brief outline of the project area's social setting. A socio-economic impact assessment is not a prescribed requirement under the EP Act and related PER guidelines, however, the PER does meet general EP Act intent with regard to provision of consultation information, including an outline of consultation activities with state and local government as well as community, landholders and non-governmental organisations (NGOs). The PER provides a summary of issues raised and references responses to this, as well as communication methods used by the proponent. A commitment to ongoing consultation is stated within the PER. Subsequent to the PER public comment period, a detailed response document was prepared which provides a response to each item raised during the PER public comment period. The response document also provides statements of intent with regard to local community programmes, sponsorship, and local procurement policies which are not outlined in the PER and an ongoing commitment

¹ Shire Local Planning Policy No. 30 (file: A1646, Trim: E09/7379): Mineral Sands Extraction (22 February 2010)

to consultation (Olympia, 2007). The EPA (2007) project assessment report identified the lack of detail provided relating to ongoing consultation and community development programmes, and recommended these be identified.

There is some contradiction between the response document (Olympia, 2007) and Matilda (2010) DA relating to Aboriginal heritage. The response document states an Aboriginal heritage survey was undertaken in 2006 and two heritage site boundaries were located within the mine area. The decision to disturb or avoid sites was not fixed at the time and a commitment was made to an archaeologist being present during topsoil stripping in the southern site portion (Olympia, 2007). The Matilda Zircon Ltd (2010) DA differs from response document statements on heritage sites, stating the 2006 heritage survey revealed no archaeological sites are located on the subject site.

It is recommended the Shire consider requesting further detail on the following with regard to the proponents approach to consultation and community development commitments:

- Request a copy of the consultation plan and related processes for review, including feedback processes, complaints and complaints resolution details;
- Review community development programme documentation to assess compliance with DA and PER commitments;
- Review or confirm the South West 'Buy Local' policy and construction local procurement approach referenced in the PER response document (Olympia, 2007); and
- Obtain clarification on Aboriginal heritage statements within the response document (Olympia, 2007) and Matilda Zircon Ltd (2010) DA, to confirm the revised project location does not include the areas of heritage identified in the response document and whether an archaeologist is required for topsoil stripping in the southern aspect of the site.

4.2 Local Planning Policy No. 30

There is considerable difference in the type of social matters outlined in the Policy compared to the EP Act. The Policy matters considered in this review are outlined in Section 3.2. The Policy was in draft at the time of the Matilda Zircon Ltd (2010) DA submission to the Shire of Serpentine Jarrahdale. *Relevant matters* under Appendix B of the Policy are outlined in the DA however in general terms items are not discussed qualitatively or framed in such a way as to provide complete information, support data or discussion. A summary of key matters which the Shire may consider further review of to qualify commitments and potential impacts include:

- Items 34 - 40: Community
 - The DA does not discuss or qualify statements with regard to predicted impacts to community, in the context of township proximity or residences surrounding the site. Although it is likely the development may not have significant impacts due to the location, duration and rehabilitation program, these are not discussed specifically to qualify statements of no expected impact with regard to the Policy;
- Items 41- 45: Employment
 - A general outline of possible employment opportunities and numbers is provided across the different reports, although a socio-economic review was not undertaken as part of the PER or DA. Details on specific employment opportunities are generalist and the potential for these to be sourced locally with existing skills or the actual diversity of employment opportunities is not discussed. Additional information may be requested to qualify the likelihood of employment, outlined in the DA and PER response document, being met with existing local skill sets;
 - In addition, the PER response document (2007) refers to local south west sourcing for construction purposes and a procurement policy. This is not referenced in the DA. Specific details or plans relating to this are not discussed or provided in the DA or PER documents, and the Shire may consider review of these to assess suitability or commitments;
- Items 54 - 56: Sensory Receptors

- A noise and dust impact exposure assessment was not undertaken as part of this review. Both issues received a high degree of community comment and concern (Olympia, 2007). Noise and dust measures under Ministerial approval are outlined in the DA. Due to the high level of community interest in PER noise and dust items, general good practice consultation should consider reporting and feedback mechanisms to community relating to noise and dust, and overall project information and progress, as well as complaints management and investigation. Issue resolution and responsiveness may impact the community's perception of amenity values in the future;
- There is not a specific discussion provided on amenity and lifestyle impacts in the PER or DA documentation. The DA highlights the agricultural setting of the project and the excavation and rehabilitation approach for this project will aim to reduce exposed areas (30 hectares active mineral extraction at any time). Additional discussion of the project in relation to population centres, residents and the potential project impact to amenity or lifestyle values (or lack thereof) may be of value for the Shire when assessing this Policy matter;
- Item 63: Amenity, refer above;
- Items 64 - 69: Economic
 - A socio-economic review (desktop or primary data research) was not undertaken as part of the PER or DA. Economic data is not provided to support statements that the project will provide positive or not impact negatively the Policy economic matters. There are statements in the PER response document relating to local investment activities and procurement opportunities and programs. The DA states that agricultural land values will be reinstated within 2 years of rehabilitation. No details of community development programmes, procurement policies or plans and actual employment plans and skills details are provided. Review of such documentation would provide a better understanding of the actual commitments and potential benefits/impacts to the area;
 - The potential for local/regional financial benefits associated with the quoted \$18M construction program (Olympia, 2007) or operations are not discussed in project documentation in quantitative terms or qualitative planning details provided;
- Items 77 - 78 : Infrastructure
 - The proposal does not require provision of water supply, sewer or communications;
 - The DA does not provide details on the possible Western Power supply corridor or required transformer upgrades (Olympia, 2007) to manage power supply. These details may be requested as part of Shire impact consideration relating to any required linear power corridor impacts and the potential for any additional mine power requests to impact on local or regional supply;
 - Information should be requested to demonstrate the proponent's mitigation and protection measures for existing natural gas assets on Lot 63, detailed in lands titles data (Matilda, 2010).

5.0 CONCLUSION

Based on this review, the Olympia Resources Ltd (2006) PER meets the intent of EP Act requirements with regard to consultation. The Matilda Zircon Ltd (2010) DA does not provide a complete discussion of relevant social assessment matters under Shire Local Planning Policy No. 30 or details of specific plans or mitigations. The following summarises those areas of information the Shire may consider requesting additional information on to better inform decision making in relation to the Policy, as well as ensure commitments in PER documentation are adequately redressed (refer to Section 4.1 and 4.2):

- Request a copy of the consultation plan and related processes for review, including feedback processes, complaints and complaints resolution details
- Review community development programme documentation to assess compliance with the DA and PER commitments, including business procurement opportunities (refer section 4.2).
- Obtain clarification on Aboriginal heritage statements within the response document (Olympia, 2007) and Matilda Zircon Ltd DA to confirm the revised project location does not include the areas of heritage identified in the response document and the outlined mitigation measures (refer 4.1).

- *Relevant matters* under Appendix B of the Policy are outlined in the DA however in general terms these items are not discussed qualitatively or framed in such a way as to provide complete information, support data or discussion. The Shire may consider requesting further qualitative and quantitative discussion on key matters relating to community amenity, economic impacts and employment.
- Request information on power line linear corridor development plans for the purpose of impact assessment and confirmation of any power upgrade requirements, refer section 4.2.
- Obtain confirmation of mitigation measures for potential natural gas assets located within the mine area.

Please contact the undersigned if you have any queries.

GOLDER ASSOCIATES PTY LTD



Alex Blood
Associate

AMB/CC/PDM/ajm



Peter Di Marco
Principal

Attachments: References
Golder Associates Limitations (LEG04 RL1)

j:\env\2010\107643126 - serpentine jarrahdale shire\correspondence out\10764126 001 | rev0.docx

References

EPA (1986) *Environment Protection Act 1986*

EPA (2007) Keysbrook Minerals Sands Mine, Olympia Resources Limited: Report and recommendations of the EPA, Bulletin 1269, October 2007.

EPA (2009) *Guidelines for Preparing a Public Environmental Review / Environmental Review and Management Programme*, 22 June 2009.

Matilda Zircon Ltd (2010) Application for approval to commence development, proposed industry extractive, various lots, Keysbrook, Job No. 1906, prepared by Planning Solutions Ltd, February 2010.

Olympia Resources Ltd (2006) Keysbrook Mineral Sand Project, Keysbrook, WA: Public Environmental Review, June 2006, prepared by MBS Environmental.

Olympia Resources Ltd (2007) Keysbrook Mineral Sand Project, Keysbrook, WA: Public Environmental Review Response to Submissions, June 2007, prepared by MBS Environmental.

Serpentine Jarrahdale Shire (2010) Local Planning Policy No. 30: Mineral Sands Extraction, file: A1646, Trim: E09/7379, 22 February 2010.



LIMITATIONS

This Document has been provided by Golder Associates Pty Ltd ("Golder") subject to the following limitations:

This Document has been prepared for the particular purpose outlined in Golder's proposal and no responsibility is accepted for the use of this Document, in whole or in part, in other contexts or for any other purpose.

The scope and the period of Golder's Services are as described in Golder's proposal, and are subject to restrictions and limitations. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Document. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Golder in regards to it.

Conditions may exist which were undetectable given the limited nature of the enquiry Golder was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the Document. Accordingly, additional studies and actions may be required.

In addition, it is recognised that the passage of time affects the information and assessment provided in this Document. Golder's opinions are based upon information that existed at the time of the production of the Document. It is understood that the Services provided allowed Golder to form no more than an opinion of the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

Any assessments made in this Document are based on the conditions indicated from published sources and the investigation described. No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this Document.

Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by Golder for incomplete or inaccurate data supplied by others.

Golder may have retained subconsultants affiliated with Golder to provide Services for the benefit of Golder. To the maximum extent allowed by law, the Client acknowledges and agrees it will not have any direct legal recourse to, and waives any claim, demand, or cause of action against, Golder's affiliated companies, and their employees, officers and directors.

This Document is provided for sole use by the Client and is confidential to it and its professional advisers. No responsibility whatsoever for the contents of this Document will be accepted to any person other than the Client. Any use which a third party makes of this Document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. Golder accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this Document.