



**INDICOAL  
MINING**  
AUSTRALIA PTY LTD

**Indicoal Mining Australia Pty Ltd**  
ACN 145 103 868  
c/- Boden Corporate Service  
15, Lovegrove Close, Mount  
Claremont, WA 6010

Telephone | **+61 8 61402470**  
Direct |  
Mobile |  
Email | **kiran@advaita.sg**

---

**ANNUAL REPORT – LANGLOH EL28/2008**  
**BLACK ROCK ENERGY PTY LTD**  
a subsidiary of Indicoal Mining Australia Pty Ltd

---

**Annual Report**  
**Exploration Licence 28/2008**  
**201007 – 201410**  
**20141031**

## Abstract

The exploration licence 28/2008 at Hamilton is viewed as prospective for coal, and is referred to as the Langloh Project. The Langloh Project comprises a granted tenement covering an area of 113km<sup>2</sup> near the town of Hamilton, and the tenement surrounds the Kimbolton Coal Mine. The current tenement holder of exploration licence 28/2008, Black Rock Energy Pty Ltd ("BRE"), was acquired by Indicoal Mining Australia Pty Ltd ("Indicoal") on 6 June 2011.

Golder Associates Pty Ltd ("Golder") was appointed by Indicoal to conduct a Concept Mining Study. The objective of this study was to assist Indicoal in evaluating the feasibility of developing the Langloh Project and support Indicoal's application for issuance of a mining lease.

Subsequently, Golder was also appointed by Indicoal to draft a Notice of Intent (NOI). The NOI is a formal notification to the EPA and the Minerals Department of Indicoal's intent to obtain environmental approvals and a mining licence with the intention of developing the Langloh Project. Pursuant to this, Golder filed a Notice of Intent for Langloh on behalf of Indicoal, during the reporting year. Indicoal has been informed by the Department of Sustainability, Environment, Water, Population and Communities by letter dated 9/9/2013, that the proposed Langloh open cut coal mine project, was determined to be a 'Controlled Action' as per the EPBC Act. Further Indicoal was informed by the EPA per letter dated 27/9/2013, Tasmania that the class of assessment for the project will be Class 2C.

Coal Plus Pte Ltd (Singapore) was appointed by Indicoal to evaluate the Indian power sector, status of the Indian coal demand, regulatory environment and identification of potential off takers for coal to be produced by the Langloh Project. During 2013, Coal Plus completed the study of Indian Power market, Coal market and Regulatory environment, identified off-takers and finalized commercial agreement and FSA with Meenakshi Energy.

Indicoal has signed MOU with Tasports and is in the process of discussions with Tasrail and other private parties for the transport the coal from the Langloh Project site to a port for exports.

Black Rock Energy Pty Ltd (Black Rock Energy) has undertaken a program of regulator and stakeholder engagement which included face-to-face briefings / meetings to introduce the project and seek stakeholder input into future engagement preferences and key issues regarding the development of exploration license EL28/2008. The outcomes of these meetings highlighted key issues for our consideration including:

- Social and environmental impacts
- Visual amenity issues
- Traffic and transport options from the mine to the point of export.

A revised stakeholder engagement strategy was determined as a result of these meetings. We have also completed desktop environmental studies in order to submit the Notice of Intent (NOI) and prepare Commonwealth referrals.

## **Contents**

### **Abstract**

- 1. Introduction**
- 2. Review of Previous Work**
- 3. Exploration Work Completed During the Report Period**
- 4. Results**
- 5. Conclusions**
- 6. Environment**

## **Figures**

**Figure 1: EL28/2008 Location Map**

**Figure 2: JORC Resource Areas**

**Figure 3: Proposed Pit Layout and Facilities**

## 1. Introduction

This report covers work conducted within tenement EL28/2008, referred to as the Langloh Project, which is in the district of Hamilton (see Figure 1) within the reporting period of November 2013 to October 2014 (“Reporting Period”). The current tenement holder is BRE, which is a subsidiary of Indicoal. Indicoal acquired the tenement via its acquisition of BRE from Spitfire on 6 June 2011.

Golder completed a Concept Mining Study on the Langloh Project. The Concept Mining Study shall form the basis for Indicoal’s application for a mining licence to develop the Langloh Project. Indicoal has also appointed Golder to file a Notice of Intent with the EPA and the Minerals Department to initiate the process for completing an environmental impact assessment of the Langloh Project and obtain all environmental approvals required to commence development of the Langloh Project. Pursuant to this, Golder filed a Notice of Intent for Langloh on behalf of Indicoal. Indicoal has been informed by the Department of Sustainability, Environment, Water, Population and Communities by letter dated 9/9/2013, that the proposed Langloh open cut coal mine project, was determined to be a, ‘Controlled Action’ as per the EPBC Act. Further Indicoal was informed by the EPA per letter dated 27/9/2013, Tasmania that the class of assessment for the project will be Class 2C.

Indicoal also appointed a Singapore-based consultant Coal Plus to evaluate the Indian power sector, status of the Indian coal demand, regulatory environment and identification of potential coal off takers for coal to be produced by the Langloh Project. During 2013, Coal Plus completed the study of Indian Power market, Coal market and Regulatory environment, identified off-takers and finalized commercial agreement and FSA with Meenakshi Energy.

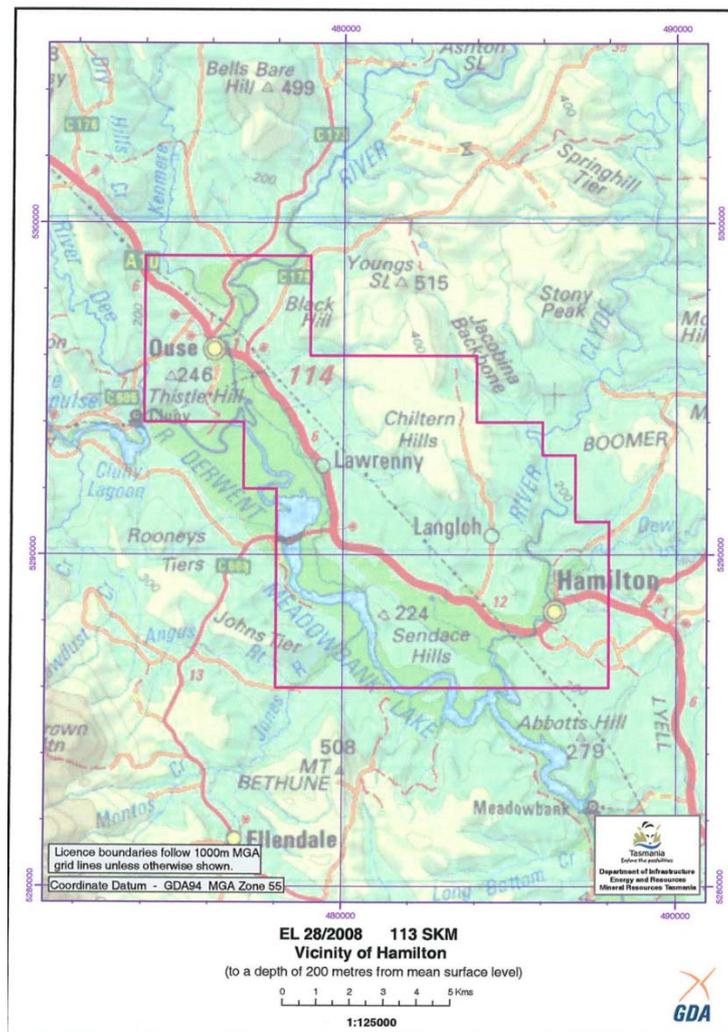


Figure 1: EL28/2008 Location Map

## 2. Review of Previous Work

A comprehensive data review was undertaken by Spitfire in conjunction with Marston during previous reporting periods. The purpose was to gain an understanding of the geology and to ascertain the exploration process. Results of this work were noted in the previous annual reports.

Spitfire conducted a drilling program targeting coal seams within the licence area. Marston was contracted to manage the drilling program in accordance with the environmental recommendations set out by the MRT.

The drilling program comprised:

- A site visit by Spitfire representatives to finalise the drill collar locations;
- A Work Program Application (WPA) was submitted to MRT on the 19<sup>th</sup> January 2010 and granted on the 10<sup>th</sup> February 2010;
- Marston supervised the drilling program within the tenement;
- Engaging KMR Drilling (a local drilling contractor) to conduct the drilling operations;
- The drilling program consisted of 11 drillholes (8 diamond and 3 RAB) for a total aggregate of 682 metres (see Figure 2);
- Samples were collected and submitted to SGS in Newcastle for analysis;
- Down hole Surveying was completed on all drill collars where possible; and
- All drill sites were rehabilitated and a visual site inspection was conducted on all drill sites by the Marston Representatives to ensure minimal ground disturbance and that all environmental standards had been followed.

Three coal seams were identified with an average of 3.6m in cumulative seam thickness and a coal resource was delineated.

Selected samples from the drilling program were despatched to SGS in Newcastle for a 3-month program of coal quality analysis.

Golder completed Concept Mining Study for Indicoal. This involved a study of geological, mining and infrastructure plans of the project in order to support a mining lease application. It also included a study of local geology of the deposit and an investigation of previous exploration programs within and surrounding the area of interest.

Golder compiled a borehole database using both historical and recent data to construct a geological model. In construction of the borehole database, Golder has utilised a variety of historical resources including:

- Capricorn Mining Ltd. Annual and Quarterly Reports
- Coal quality analysis reports produced by the Australian Mineral Development Laboratories (AMDEL) and SGS Australia Pty Ltd.
- Float-Sink data by SGS Australia Pty Ltd
- Geophysical logging data and reports by BPB Ltd
- Geophysical logging data and reports by Mitre Geophysics Pty Ltd
- Geophysical logging data and reports by Ground search Australia Pty Ltd
- Lithological logging data by Petrecon Australia
- Lithological logging data by Marston International Pty Ltd

Historical data from these sources was collated, cross referenced and verified in order to produce the project's final geological model.

A borehole database of available assays was constructed in-line with JORC requirements. The constructed database was imported into Maptek Vulcan software allowing for 3D geological modelling of the Langloh project.

In order to produce reliable results, Golder has ensured that all data had been verified and validated. Where this was not possible, discretion was used to amend or totally remove the data from the database.

Based on this model, an estimate of in-situ resources has been calculated and reported in accordance with the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, The JORC Code" 2004 edition (JORC) guidelines.

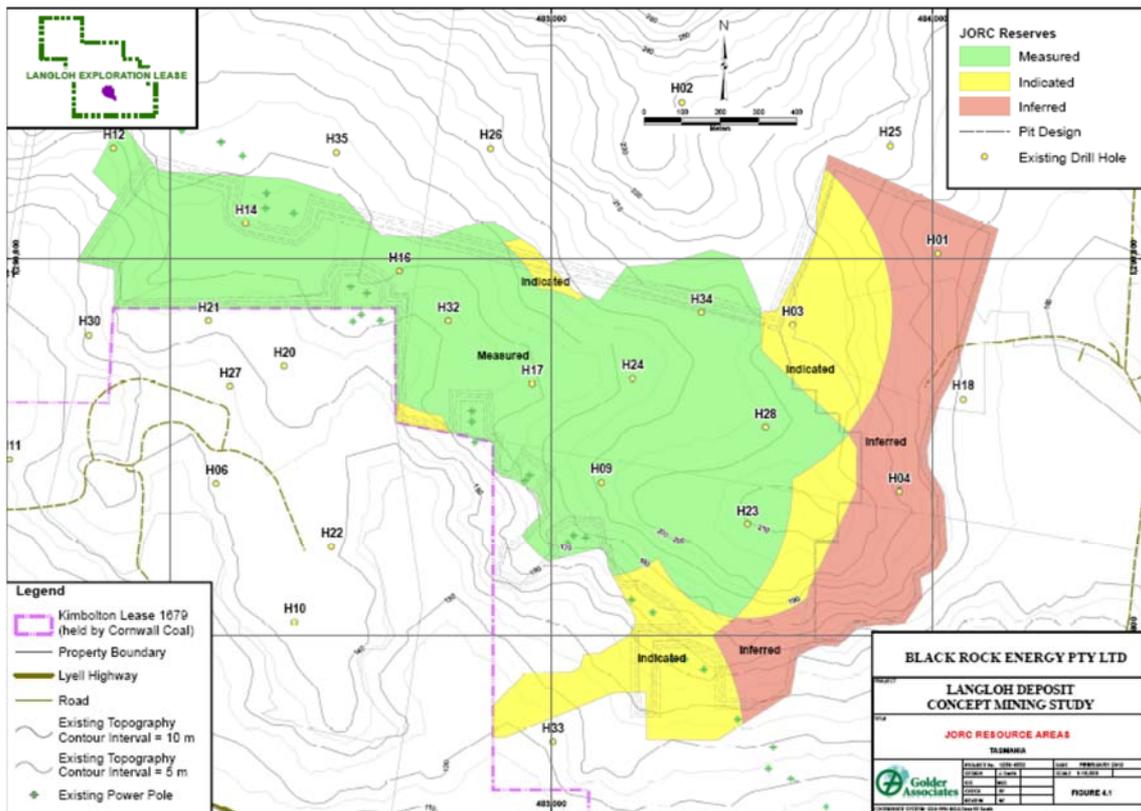


Figure 2: JORC Resource Areas

Golder also estimated Run-of-mine (ROM) coal tonnage, but this is not JORC compliant and has been only used to calculate conceptual production schedule, equipment requirements and financial estimates.

A unit based cost analysis consistent with a conceptual level study has also been conducted in order to estimate the economic validity of the mine plan. Due to conceptual nature of this study, an accuracy of +/-35% is to be expected as per Golder estimates.

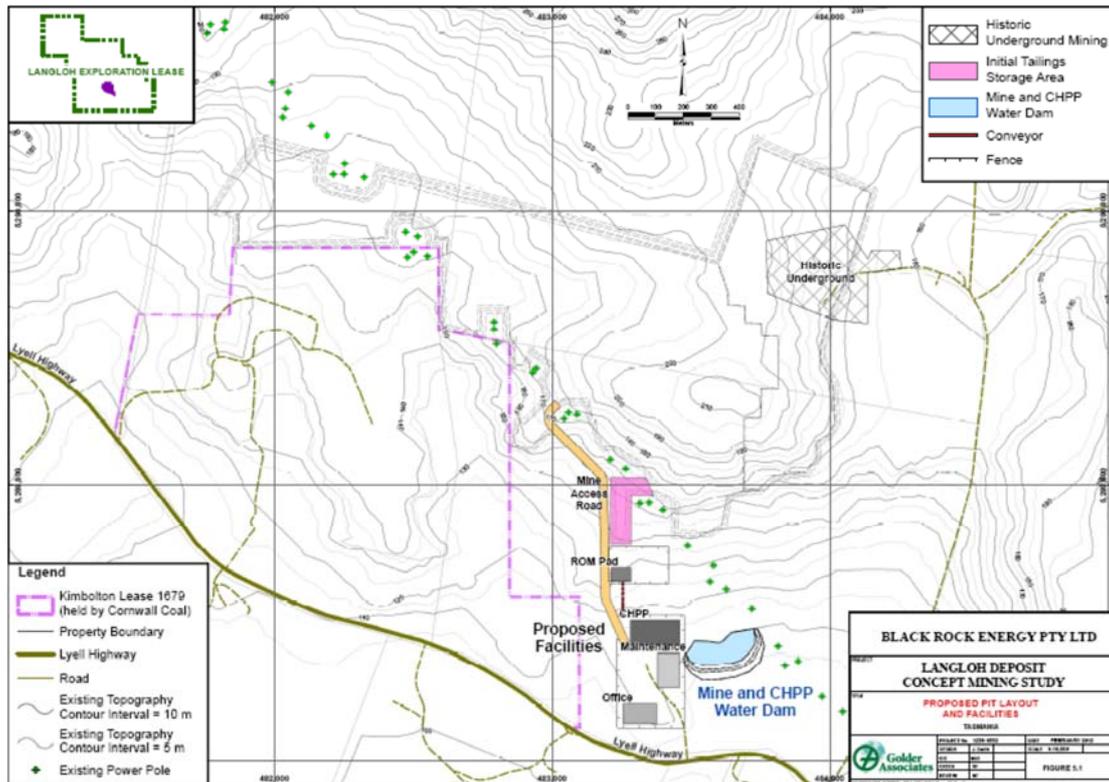


Figure 3: Proposed Pit Layout and Facilities

## Coal resources

Based on the current drilling information, Golder has estimated that the Langloh deposit contains 8.1 million tonnes (MT) of in-situ coal resources as detailed in table below.

Description	Coal resources (tonnes)	Moisture (% adb)	Ash (%adb)	Volatile Matter (% adb)	Fixed Carbon (% adb)	Calorific Value (MJ/kg adb)	Sulphur (adb)
Measured	5,500,000	4.6	25.7	17.3	52.5	23.8	0.31
Indicated	1,200,000	5.2	28.9	19.2	46.7	24.1	0.32
Inferred	1,400,000	4.9	27.7	18.3	49	24.8	0.30
<b>Total</b>	<b>8,100,000</b>	<b>4.7</b>	<b>26.5</b>	<b>17.7</b>	<b>51</b>	<b>24</b>	<b>0.31</b>

As can be seen in the table above nearly 68% of the resources are within a measured confidence level while nearly 83% of the total is measured and indicated status.

Given the high in-situ ash content of the seams, the option of washing coal has been evaluated. It is estimated by Golder that Langloh coal can be washed to obtain a product coal yielding 83% of ROM coal, containing 18% ash (adb), CV of 25.9 MJ/kg with a product moisture content of 8% (arb).

## Production schedule

Golder designed a conceptual pit shell for use in designing a life-of-mine production schedule. Based on this design, Golder determined that the Langloh project could have a mine life of 8 years and produce a total of 6.7mt of coal. Average annual production is estimated at 910,000 tonnes.

This is subject to assumption of adequate mine and logistics infrastructure support, as the logistics options are still being evaluated and may prove to be limiting factor (especially the rail capacity in Tasmania).

Life-of-mine production schedule:

Year	Coal tonnage (ROMt)	Waste Volume (bcm)	Stripping Ratio (bcm/ROMt)
1	400,000	1,900,000	4.8
2	850,000	4,500,000	5.3
3	910,000	5,500,000	6.0
4	910,000	5,500,000	6.0
5	910,000	5,600,000	6.2
6	910,000	5,600,000	6.2
7	910,000	5,600,000	6.2
8	900,000	5,100,000	5.7
<b>Total</b>	<b>6,700,000</b>	<b>39,300,000</b>	<b>5.9</b>

## Equipment selection

Given the size and shape of the Langloh project combined with annual waste and coal production, Golder determined that the mining method would be an open cut excavator/truck fleet operation supported by production dozers.

Golder selected an excavator truck/fleet that could accommodate waste removal and coal mining activities. The primary equipment selected is:

1. Hitachi EX1900- Hydraulic Backhoe, 12 cu.m. bucket capacity - 1
2. Caterpillar 777F End Dump Haul Trucks, 91-tonne capacity – 4
3. Caterpillar D11T Dozers, 611kW - 3
4. Driltech D45KS Drill, 152mm bit diameter -1.

## **Labour**

To operate, maintain and supervise the mine, Golder has estimated that c20 operations personnel, 8 maintenance personnel and 11 salaried personnel would be required to sustain operations assumed at 1 shift of 12 hours per day and 6 days a week.

## **Commercial feasibility**

During the year 2011-12, Indicoal had appointed Singapore based consultant Coal Plus to evaluate the Indian power sector, status of the Indian coal demand, regulatory environment and identification of potential coal off takers for the thermal coal to be mined from Langloh (EL 28/2008). During 2013, Coal Plus completed the study of Indian Power market, Coal market and Regulatory environment, identified off-takers and finalized commercial agreement and FSA with Meenakshi Energy.

## **Evaluating logistics options**

Indicoal has identified 3 possible alternatives to transport coal from mine to port;

- Truck haulage across 250kms distance from mine to Bell Bay port;
- Part truck part rail haulage to Bell Bay port;
- Barging the coal down the river to a ship loading point off the coast of Hobart.

During 2013, Indicoal executed a Costs Agreement with TasPorts for TasPorts to provide advice in relation to the potential options for the exporting coal produced by the Langloh Project, using TasPorts' infrastructure and facilities.

During the 2013, further progress was made resulting from tour of Coal Plus consultant during December 2012. Indicoal is also in talks with private companies to evaluate the possibility to barge the coal down the river to a ship loading point.

## **Environmental approvals**

Indicoal has appointed Golder to file a Notice of Intent with the EPA and the Minerals Department to initiate the process for completing an environmental impact assessment of the Langloh Project and obtain all environmental approvals required to commence development of the Langloh Project. Pursuant to this, Golder prepared and filed a Notice of Intent in accordance with Section 27B of the EMPC Act. Further, a referral was also filed under provisions of EPBC Act. Consequently, Indicoal has been informed by the Department of Sustainability, Environment, Water, Population and Communities by letter dated 9/9/2013, that the proposed Langloh open cut coal mine project, was determined to be a, 'Controlled Action' as per the EPBC Act. Further Indicoal was informed by the EPA per letter dated 27/9/2013, Tasmania that the class of assessment for the project will be Class 2C.

### **3. Work Completed During the Reporting Period**

Black Rock Energy Pty Ltd (Black Rock Energy) has undertaken a program of regulator and stakeholder engagement which included face-to-face briefings / meetings to introduce the project and seek stakeholder input into future engagement preferences and key issues regarding the development of exploration license EL28/2008.

Our preferred approach to development of the site is to engage early and begin the process towards building a social license to operate, while also developing a body of environmental data which will help to meet our environmental responsibilities for the site. This approach has been considered the most appropriate given the risk considered to exist in managing social impacts.

During December 2013 Black Rock Energy and our lead consultant, Golder Associates Pty Ltd (Golder), met with the following stakeholders:

- Mineral Resources Tasmania (MRT)
- Environment Protection Authority (EPA)
- Central Highlands Council (Council) Mayor Deirdre Flint and General Manager Lyn Eyles
- Minister for Energy and Resources – Bryan Green's office (represented by his senior advisor John Martin and former Director of Mining Kim Creak)
- Minister for Environment – Brian Wightman

The outcomes of these meetings highlighted key issues for our consideration including:

- Social and environmental impacts
- Visual amenity issues
- Traffic and transport options from the mine to the point of export.

A revised stakeholder engagement strategy was determined as a result of these meetings. We have also completed desktop environmental studies in order to submit the Notice of Intent (NOI) and prepare Commonwealth referrals. The cost of this work was approximately \$30,000 in direct fees to Golder and \$16,025 in other expenses and administration fees for Black Rock Energy.

MRT require Black Rock to undertake drilling sufficient for the definition of a “marketable coal reserves statement” compliant with JORC Code 2012.

Black Rock Energy is a privately owned company owned entirely by Indicoal Mining Australia Pty Ltd (Indicoal). As a private company, we are not listed on the Australian Stock Exchange and we are not required to report to the JORC Code as we are not subject to ASX listing rules.

Nonetheless, we see the value in what the JORC Code requires for the preparation of reports for Exploration Results, Coal Resources and Coal Reserves. However to reach the level of reporting a “Marketable Coal Reserve”, our project would need to be much more advanced on many aspects apart from just the drilling components of its development.

We consider the Langloh Coal Project to be in the Preliminary Assessment (PA) phase of developing a Coal Resources. To achieve any form of Coal Reserve, we would need to have undertaken a pre-feasibility study (PFS). In partnership with our lead consultant, Golder, we have elected to develop our social and environmental understanding of the site ahead of further drilling at this stage, given that we consider social impact a key project risk. Our intended work for 2015 is outlined in the conclusions section below.

#### 4. Results

The details of actual expenditure during the report period are shown in the table below:

<b>For the year ended November 4, 2014</b>	<b>A\$</b>
Feasibility Study Costs	29,344
Land Access and Other Costs	13,171
Administrative costs (@10% of above)	3,510
<b>Total</b>	<b>46,025</b>

#### 5. Conclusions

Our priority tasks for 2015 are focused on environmental components. At this stage we intend to undertake a groundwater baseline assessment and ecological (flora and fauna) assessments for the Project site early in 2015. Other environmental studies will be undertaken on a case-by-case basis. Black Rock Energy expects to spend at least \$50,000 in 2015 as detailed below;

<b>Proposed Expenditure</b>	<b>A\$</b>
Stakeholder Engagement	30,000
Environmental Assessment and Approval	16,000
Administrative costs (10% of above)	4,600
<b>Total</b>	<b>50,600</b>

#### 6. Environment

There were no activities that could have caused environmental disturbance during the reporting period.

Golder has submitted a draft Notice of Intent on behalf of Indicoal for the project. The purpose of NOI is to:

- Provide formal notification of Indicoal's intention to develop the Langloh Coal Project.
- Initiate the environmental approvals process with the Environment Protection Authority Tasmania (EPA) under the *Environmental Management and Pollution Control Act 1994* (EMPC Act).
- Initiate the development assessment process with the Central Highlands Council (Council).
- Outline the proposed project, including its potential economic, social and environmental benefits.
- Describe the existing environment and potential environmental impacts of the project.
- Outline high-level management and mitigation measures that are will minimise adverse environmental impacts as a result of the project.
- Provide sufficient information to allow the EPA to determine the appropriate level of environmental assessment for the project.

This NOI has been prepared in accordance with Section 27B of the EMPC Act.

A desktop environmental baseline study was undertaken as part of the approvals process. This involved the review of existing data to identify the key environmental factors likely to be impacted by the project. It is expected that these impacts can be managed or mitigated through careful planning of the project and through consultation with relevant stakeholders. In order to establish the nature of these impacts and to develop management and mitigation measures, further specialist studies will be undertaken and incorporated into the environmental permitting documents. The studies proposed to be undertaken at this point include the following;

- Native flora and fauna
- Cultural and Aboriginal Heritage Investigation
- Groundwater impacts
- Ore and waste geochemistry
- Surface water and site water management
- Air quality
- Greenhouse gas
- Infrastructure and Transport
- Traffic Impact assessment
- Rehabilitation and mine closure

Indicoal is committed to establishing and maintaining relationships with its stakeholders and has put in place a framework for engagement, which will be implemented during the NOI and environmental scoping phase. Targeted consultations are planned with the following identified groups or individuals:

- Landholders impacted by the project footprint
- Regulators – such as EPA, MRT, Council
- Key government representatives – Minister for Energy and Resources and Minister for Environment, Parks and Heritage.
- Other stakeholders have been identified for consultation in subsequent stages, following the submission of the NOI and during the environmental impact assessment phase, and include:
  - Hamilton community
  - Ouse community
  - Industry groups
  - Conservation groups.

A Stakeholder Engagement Plan (SEP) has been prepared for this preliminary phase of approvals and will be regularly reviewed and revised, following each stage of consultations. During the first stage of consultations, targeted project briefings (meetings) will be held with regulators (including the Council) and key government representatives. Indicoal will be represented at these briefings by key staff and personnel from its environmental consultancy, Golder. The briefings will include a PowerPoint presentation and delivery of a project fact sheet. Summary information to be covered in this material includes:

- How will the product be mined?
- Where will the product go – potential markets?
- What are the transport routes?
- How many people will the project employ?
- What environmental studies will be completed?

- What is the overall project/approvals schedule?
- How will community / stakeholder views be considered?

To conclude, Indicoal intends to take every care to fully understand, plan for and minimise the environmental impact from the planned mining activities at Langloh.