

P.O.Box 1182, Surfers Paradise, Queensland 4217, Australia **Email:** omodeiglobal@ozemail.com.au Website: www.omodeiglobal.com

## Sunday Creek Minerals Project

SOUTH WEST OF RAVENSHOE FAR NORTH QUEENSLAND AUSTRALIA

### Project Concept Mine to Port Information Brief

November 2011

Table of Contents

INTRODUCTION	3
THE MINE	5
THE PORT	

#### INTRODUCTION

The Sunday Creek Minerals Project contains 3 mining tenures.

Montgomery John Omodei (the 'Licence/Permit Holder') privately owns and controls the Minerals Development Licence (MDL) 298 and the Exploration Permit Minerals (EPM) 15896 and 18361 (the 'Licence/Permit area') combined as one project under a single Environmental Authority (EA) which are known as;

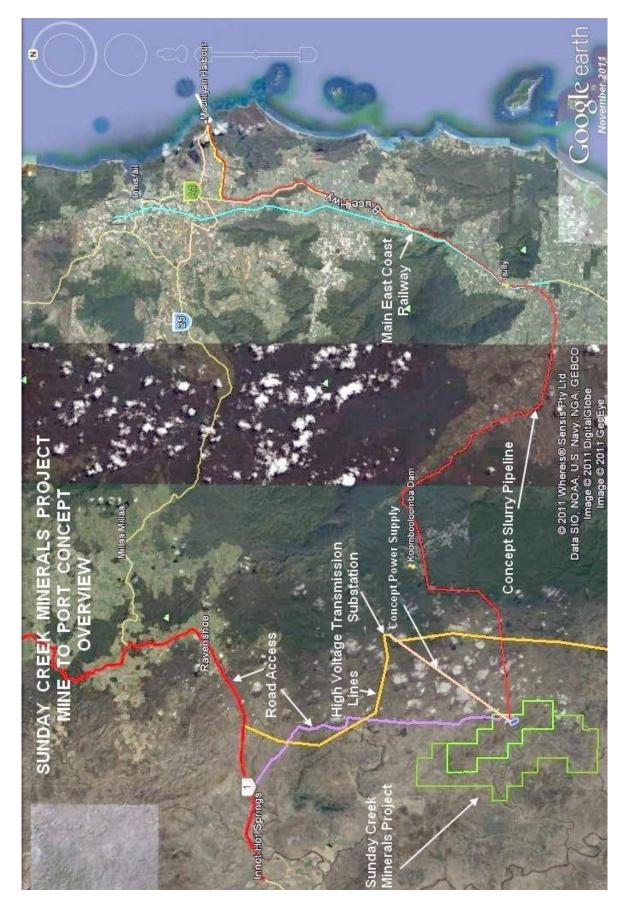
- MDL 298 Whispering Ridge;
- EPM 15896 Sunday Creek; and,
- EPM 18361 Sunday Creek Extension.

EPM 15896 and EPM 18361 are located mainly on Yourka station, extending into Blunder Park station in the north and Glen Ruth station in the south.

The Licence/Permit area consists of 45 mining tenure sub-blocks and encompasses approximately 155 square kilometres of land. MDL 298 Whispering Ridge is located within the EPM 15896 Sunday Creek area.



Regional Map of Area



#### THE MINE

The nearest export port is Mourilyan Harbour near Innisfail, Far North Queensland and is approximately 160 km by road from the Licence/Permit area via the Kennedy and Palmerston highways.

Development of DSO export capabilities will be in 3 stages.

Stage 1 An "Approved Special Work Program" is already in existence under MDL298 allowing all magnetite within the licence to be drilled.

A detailed accelerated works program and an Order of Magnitude (OOM) budget has been developed for drilling to proceed with exploration works in parallel with the application for a mining lease over the area.

A target of > 50 million tonnes of DSO grade magnetite resources to be upgraded to indicated status, as per the JORC Code and associated exploration activities.

Start Environmental Impact Statement studies including GIS surveying and mapping.

Liaise with Queensland Government Main Roads (Kennedy Highway intersection to Bruce Highway intersection for Mourilyan port), Tablelands Regional Council, Stanwell Corporation Limited and Landholders (Sunday Creek Project to Kennedy Highway) for road access.

Complete further JORC, Environmental Impact Statement and Mining Lease applications, as required.

Construct road access to Kennedy Highway (approximately 40 kilometres).

Develop mining operations to produce 700,000 tonnes per annum of DSO to be transported by road to Mourilyan port stockpile area.

- Stage 2 Expand mining operations to produce 1,200,000 tonnes per annum of DSO to be transported by road to Mourilyan port stockpile area.
- Stage 3 Liaise with Landholders, Stanwell Corporation Limited, Tablelands Regional Council, Wet Tropics Management Authority (Queensland Government Department of Environment), Cassowary Regional Council, Queensland Government Main Roads, Queensland Rail, Telecom and other Stakeholders for water supply and slurry pipeline corridor (approximately 130 kilometres).

Complete Environmental Impact Statement for water supply and slurry pipelines and mine expansion.

Expand mining operations, construct slurry plant, water supply pipeline and slurry pipeline to Mourilyan port to produce and deliver 5,000,000 tonnes per annum by slurry pipeline to the dewatering plant at Mourilyan port.

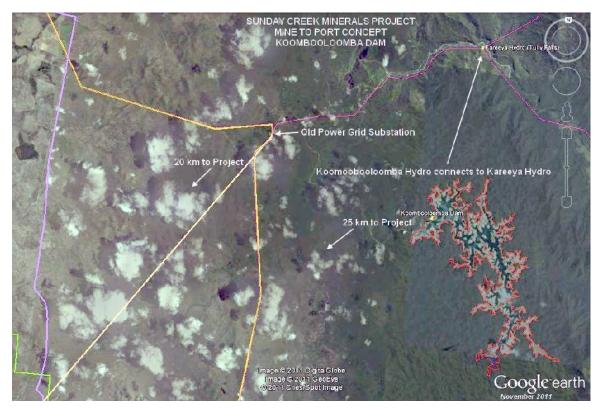
#### Power and Water Utilities

The catchment area of the Tully River spans approximately 260 square kilometres across one of Australia's wettest regions. Some of this rainfall finds its way to Koombooloomba Dam on the Atherton Tableland, which has a standard capacity of 180,000 megalitres and can manage an additional capacity of 25,000 megalitres using a rubber dam extension. This is an inflatable rubberised tube which is fitted along the crest of the spillway.

Stanwell Power Corporation Limited owns and operates 2 Hydro power stations at Koombooloomba and Kareeya. Using the combined generating capacities of the 7.3 MW Koombooloomba Hydro power station and the 86.4 MW Kareeya Hydro power station, Stanwell twice captures energy from water flowing down the Tully River as it makes its way from the Atherton Tableland to the ocean.

This power generation is connected to the Queensland power grid at the Kareeya switchyards.

Koombooloomba Dam is located approximately 25 kilometres from the Sunday Creek Minerals Project and a Queensland power grid 132,000 Volt substation is located approximately 20 kilometres from the Sunday Creek Minerals Project.



Koombooloomba Dam

#### Geology

Exploration over recent years has focused on magnetite iron ore whilst every sample collected has been tested for up to 33 other minerals to add to overall prospects of the project.

Extensive Aerial Total Magnetic Intensity/Electromagnetic, Ground Magnetic & Sub-Audio Magnetic surveys have also been performed over large areas within the Permit/Licence boundaries and further drilling programs at and around MDL 298 Whispering Ridge.

The results and analysis and interpretation of these results are very detailed and contain a large amount of data and reports and are available in separate *Sunday Creek Minerals Project Mine Geology Summary Reports & Data.* 

The following summarises these results and analysis.

#### Iron Ore

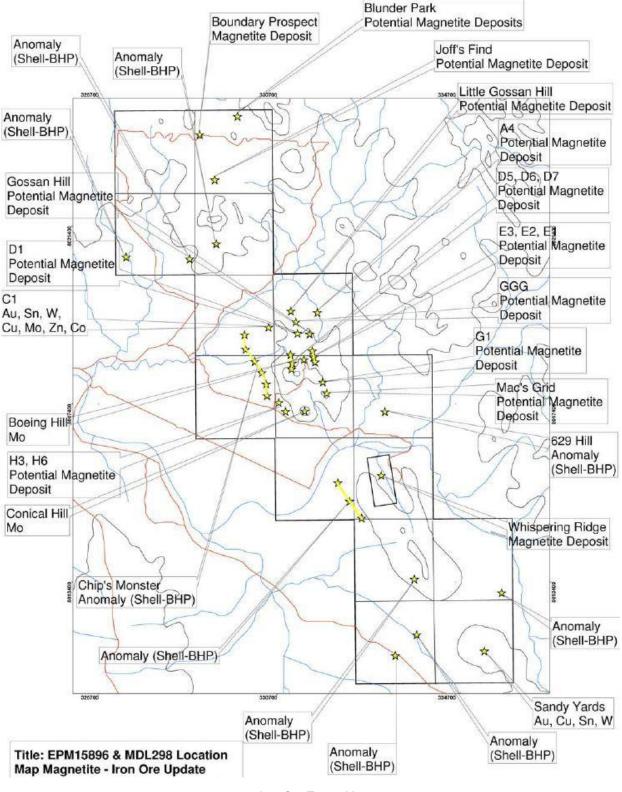
- Whispering Ridge (MDL 298) is the original tenement to this block. MDL 298 is a 55 hectare tenement, **known** to contain DSO grade (Fe > 62%) magnetite iron ore. MDL298 is identified by the rectangle on the Iron Ore Target Map.
- Magnetic and density analysis (undertaken by CSIRO on behalf of BHP Coal) confirms this ore is suitable as HMS media, used for washing coal. Such ore commands a

substantial premium to DSO prices. The remainder of the ore is DSO grade and will be sold for steel-making.

- HMS suitable magnetite is presently imported, two Australian mines having recently been exhausted.
- Sub-audio magnetic analysis (GAP Geophysics) has enabled modeling of the magnetite body within MDL 298, commencing at shallow depth. Geophysical modeling does not accurately predict depth of continuation, but the known geology reports that magnetite occurs in steeply dipping pods, perhaps extending > 200 metres below the surface.
- Ground magnetrometry demonstrates the ore body extends for greater than the drilled section.
- Sub-audio magnetics strongly infers the magnetite extends sub-surface to the South-West. This is consistent with aerial magnetics reported by Shell Minerals. The lode may extend continuously, or as a series of closely interspersed pods, implying a resource > 40 million tones
- MDL 298 is a small part of a far larger, highly prospective zone for **multiple** minerals see Other Minerals Target Map.
- The occurrence of magnetite in the region is common. Deposits currently mined by Kagara Zinc at Mt Garnet and Balcooma contain significant quantities of magnetite.
- Aerial and ground based magnetics:
  - Shell (1981): airborne radiometrics, aeromagnetics, ground magnetics (data reviewed by GAP Geophysics & Mira)
  - > BHP (2005): aeromagnetics (data reviewed by GAP Geophysics & Mira)
  - GAP Geophysics (2007 09): sub-audio magnetics (data captured and evaluated by GAP Geophysics)

indicate at least ten possible additional pods of magnetite and several independent magnetite skarns, the latter being possibly continuous sub-surface – see for example: Target Map, "Chip's Monster" and "Anomaly Shell-BHP".

- These sites have been ground-truthed by anomalously high readings for iron in soil and rock samples, analysed by independent laboratories.
- Total targeted magnetite potential > 800 million tonnes.



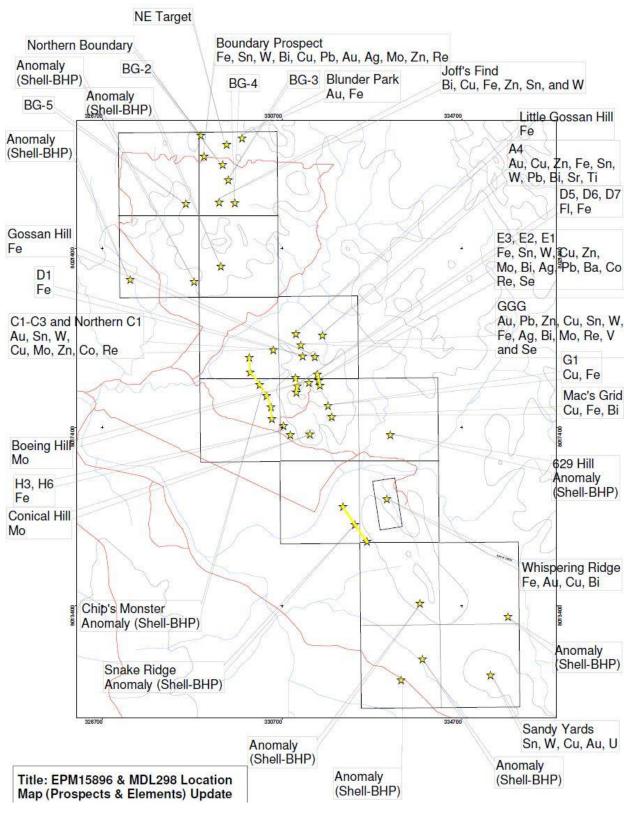
Iron Ore Target Map

#### **Other Minerals**

- Geochemistry suggests at least four gold prospects.
- Other minerals reporting anomalously high grades in soil and rock samples include copper, zinc and molybdenum.
- This is consistent with the geology of the region, being the junction of the highly productive Burdekin and Palmerville faults. Such fault junctions are associated with massive subterranean "plumbing" systems and associated mineralization.

There are apparently at least four (4) styles of mineral deposits now discovered:-

- 1. "IOCG" (Iron Oxide Copper Gold) style ore deposits.
- 2. Porphyry molybdenum deposits.
- 3. Poly-metallic skarn deposits.
- 4. Magnetic deposits with skarn affinities.



Other Minerals Target Map

#### THE PORT

The Port of Mourilyan is located approximately 100 km south of Cairns, near Innisfail, Far North Queensland and has access to the main east coast shipping channel.

Currently the port is mainly used to export sugar and molasses from the region utilising a 45,000 dwt berth.

The Far North Queensland Ports Corporation Limited (Ports North), a Queensland Government Owned Corporation is responsible for managing all ports north from Mourilyan with the exception of Weipa including Cairns, Cape Flattery, Cooktown, Burketown, Karumba, Mourilyan, Quintell Beach, Skardon River and Thursday Island (www.portsnorth.com.au).

Ports North are keen to develop new business concepts for the port and have included in their future plans the need to expand the current 45,000 dwt berth to three (3) 45,000 dwt berths plus a future 2.9 kilometre jetty for a deep channel panamax berth.

Mourilyan Port is serviced by an existing harbour road and there has been a new harbour road line designated to service any port expansion. The port is close to the Queensland main east coast railway and Bruce Highway travelling along the Queensland coast between Brisbane and Cairns.

Development of DSO export capabilities would be in 3 stages.

Stage 1 Liaise with Ports North for use of Strategic Port Land at Mourilyan Harbour.

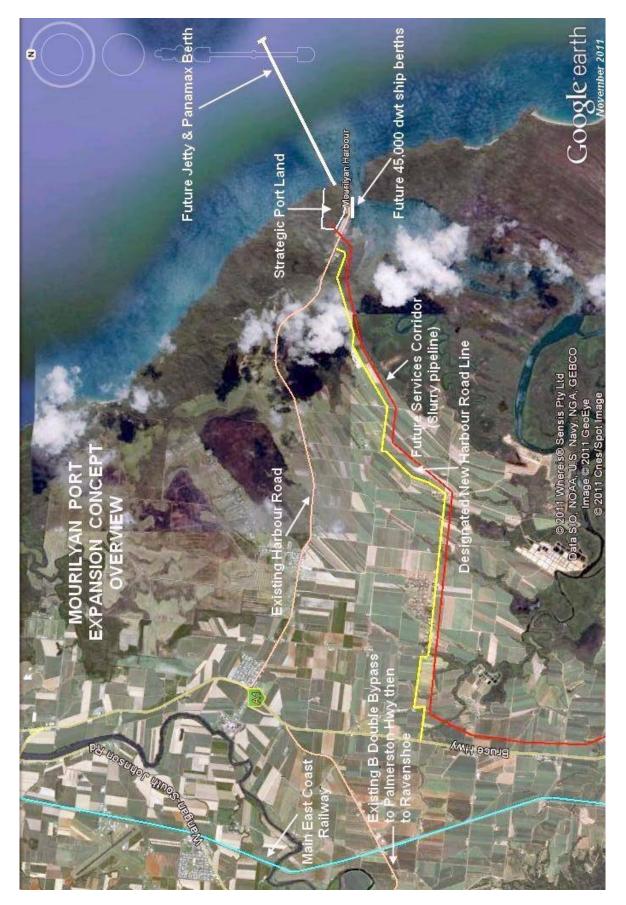
Liaise with Queensland Government Main Roads, Cassowary Coast Regional Council and Ports North (Bruce Highway intersection to Mourilyan Harbour) for road access.

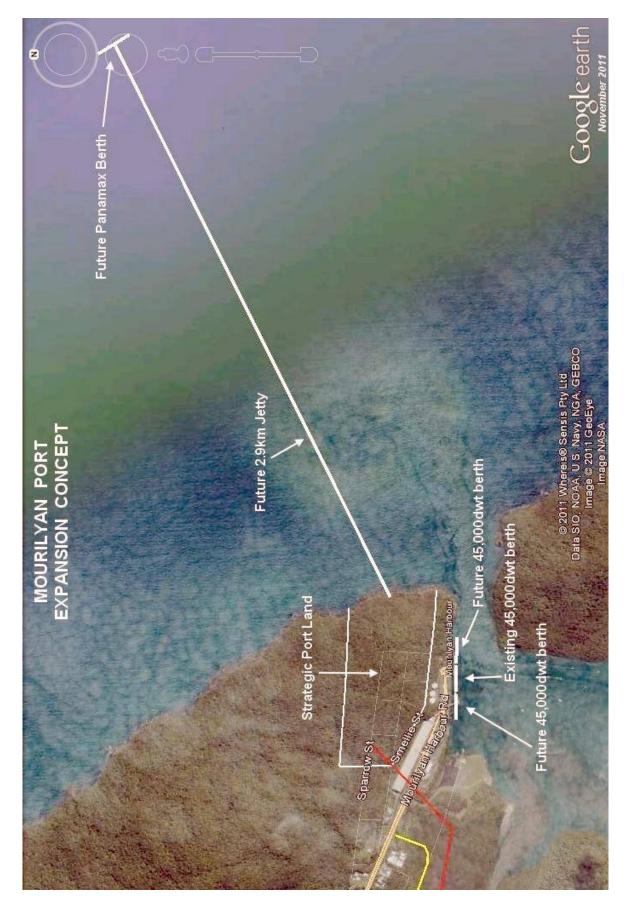
Complete Environmental Impact Statement.

Utilising existing 45,000 dwt berth and construct 50,000 tonne stockpile area with 2,000 tonne per hour conveyor shiploading system handling 700,000 tonnes of DSO per annum.

- Stage 2 New 45,000 dwt berth and extend 2,000 tonne per hour conveyor shiploading system handling 1,200,000 tonnes of DSO per annum.
- Stage 3 Complete Environmental Impact Statement for dewatering plant, jetty, panamax berth and stockpile extension.

Construct Dewatering plant for slurry pipeline, extend stockpile area to 100,000 tonnes, construct 2.9 kilometre jetty with panamax berth and 2,000 tonne per hour conveyor shiploading system handling 5,000,000 tonnes of DSO per annum.







Home | About Us | Contacts | Careers | Help | Feedback |

SEARCH »

Global | Australia | NSW | Vic. | Qld | WA | SA | Tas. | ACT | NT | Ant. |

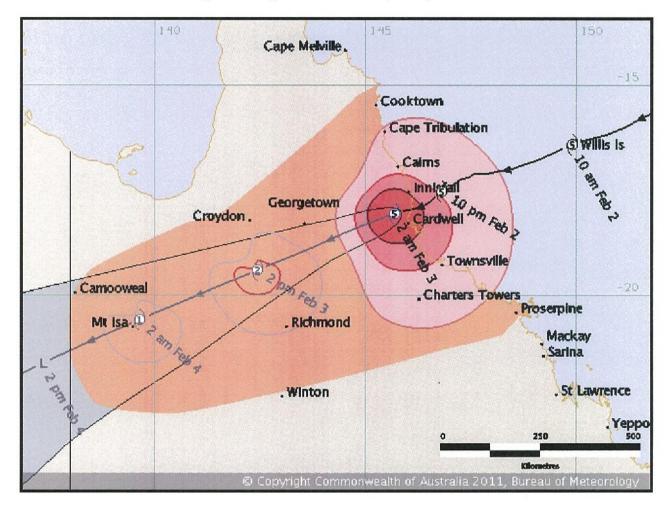
Weather & Warnings | Climate Information | Water Information | Radar | Learn About Meteorology |

AUSTRALIAN GOVERNMENT BUREAU OF METEOROLOGY TROPICAL CYCLONE WARNING CENTRE BRISBANE

#### TROPICAL CYCLONE FORECAST TRACK MAP

#### Severe Tropical Cyclone Yasi

Issued at 2:09 am EST Thursday 3 February 2011. Refer to Tropical Cyclone Advice Number 26.



Community Threat		Past Cyclone Details	
Warning Zone - Gales within 24 hours		Past Location and Intensity Number	Ø or L
Watch Zone - Gales from 24 to 48 hours		Past Track and Movement	
Current Cyclone Details		Forecast Cyclone Details (at 24 and 48 hours from issue)	
Current Location and Intensity Number	(a) or L	Forecast Location and Intensity Number	@or L
Very Destructive Winds	$\bigcirc$	Very Destructive Wind Boundary	$\bigcirc$

# 

MTSAT IR Colorized Loop

Maintained by NESDIS Satellite Services Division <u>GOES Webmaster</u>



z

INE TO PORT CON

Miliaa Miliaa

Ravenshoe

ounityan Harbour

25

Innot Hot Springs

Road Acc

Sunday Creek Minerals Project

High Voltage Transmission Lines Substation Concept Power Supply

Concept Slurry Pipeline

**UID** 

© 2011 Whereis® Sensis Pty Ltd Data SIO, NOAA, U.S. Navy, NGA, GEBCO Image © 2011 DigitalGlobe Image © 2011 GeoEye

ogle earth

er 201

Main East Coast Railway 🔨

WH BONG

SUNDAY CREEK MINERALS PROJECT MINE TO PORT CONCEPT KOOMBOOLOOMBA DAM

Kareeya Hydro (Tully Falls)

N

- Old Power Grid Substation

20 km to Project

Koomoobooloomba Hydro connects to Kareeya Hydro

Koombooloomba Dam 25 km to Project

Image © 2011 DigitalGlobe Image © 2011 GeoEye © 2011 Cnes/Spot Image

Google earth



#### ENVIRONMENTALLY SUSTAINABLE HYDRO POWER LOCATED IN FAR NORTH QUEENSLAND

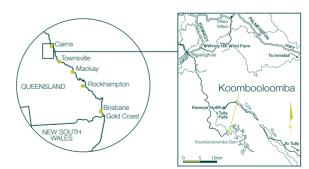


#### About Stanwell

Stanwell is a Queensland Government owned corporation with an energy portfolio comprising coal and hydro facilities throughout Queensland. Currently, Stanwell trades more than 30 per cent of the State's electricity requirements.

#### Statistics

Capacity	7.3 MW
Greenhouse Gas Savings	20,000 tonnes per year
Powered Equivalent	70,000 x 100 watt light bulbs
Commissioned	1999



Koombooloomba Hydro is located in the Wet Tropics World Heritage Area on Koombooloomba Dam, 37 kilometres south of Ravenshoe, in Far North Queensland.

#### CERTIFIED ENVIRONMENTAL NUMAURIZET STORY

## Koombooloomba

## Hydro

#### > About the project

Koombooloomba Hydro is a dam release point hydro and operates by capturing energy from existing water releases required for the operation of Kareeya Hydro located downstream, also owned and operated by Stanwell.

Commissioned in 1999, the 7.3 megawatt (MW) power station was constructed in line with principles of environmentally sustainable development. Its position on Koombooloomba Dam capitalises on the dam's original infrastructure that was established in 1960 and provided for an outlet for future hydro-electric development.

#### > Water supply

The catchment area of the Tully River spans approximately 260 square kilometres across one of Australia's wettest regions. Some of this rainfall finds its way to Koombooloomba Dam on the Atherton Tableland, which has a standard capacity of 180,000 megalitres and can manage an additional capacity of 25,000 megalitres using a rubberdam extension. This is an inflatable rubberised tube which is fitted along the crest of the spillway.

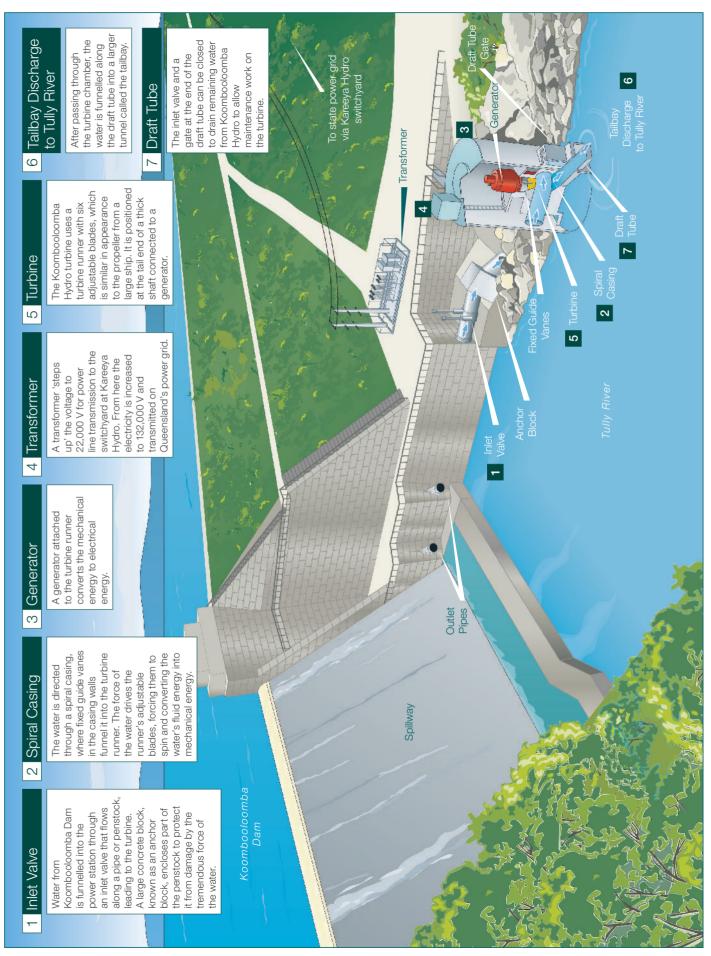
Using the combined generating capacities of Koombooloomba Hydro and the 86.4 MW Kareeya Hydro, Stanwell twice captures energy from water flowing down the Tully River as it makes its way from the Atherton Tableland to the ocean.

#### > Environment

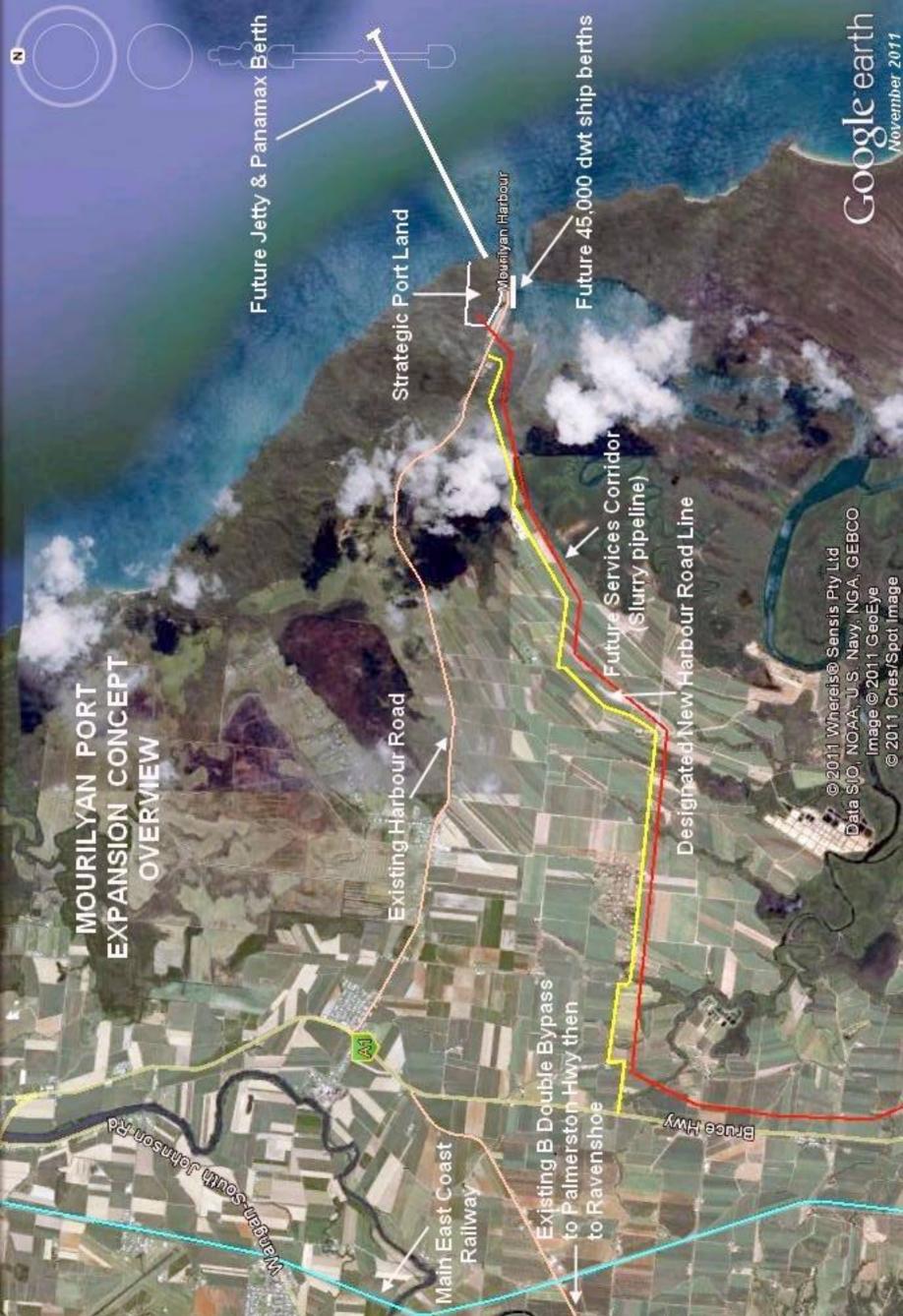
Hydro-electric generation (using the energy of moving water to drive generators) is one of the cleanest and most efficient methods of producing electricity from a natural source. Koombooloomba Hydro was designed and constructed according to strict environmental requirements. Operation of the hydro does not emit any greenhouse gases and it is one of only a few power generation facilities in Queensland able to supply green power.

It operates within a certified ISO 14001 Environmental Management System and is an accredited green generator.

#### > How electricity is made at Koombooloomba Hydro









Future Panamax Berth

z

Future 2.9km Jetty

Strategic Port Land

Existing 45,000 dwt berth

Future 45,000dwt berth

Future 45,000 dwt berth Mounty and Harbour

<sup>shiellie</sup>.St

Sparrow St



© 2011 Whereis® Sensis Pty Ltd Data SIO, NOAA, U.S. Navy, NGA, GEBCO Image © 2011 GeoEye Image NASA







6<sup>th</sup> April 2011

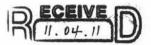
Cnr Grafton & Hartley Streets Cairns PO Box 594 Cairns Qld 4870 Australia

Phone +617 4052 3888 Fax +617 4052 3853 Email enquiries@portsnorth.com.au

www.portsnorth.com.au

ABN 38 657 722 043 ACN 131 836 014

Far North Queensland Ports Corporation Limited trading as Ports North



Wayne Bishop c/o Omodei Global Group P.O.Box 1182 Surfers Paradise, Queensland, 4217 Australia

Dear Wayne,

#### SUBJECT: EXPORTING MAGNETITE FROM MOURILYAN PORT

Ports North were very pleased to learn of Omodei Global Group's interest to consider our Port of Mourilyan for potential storage and export, of magnetite ore, from the magnetite mining project(s) that Omodei Global Group are currently evaluating from mining tenements in the Sunday Creek and Whispering Ridge areas, south of Ravenshoe.

At this stage, no doubt, it is a complex matter of pulling together many differing aspects, of which the export considerations are but one, key aspect. Ports North has a long history of working with Port users and developing efficient procedures, to ensure our customers have the best opportunity to compete and win, in the international market place, for bulk products.

We look forward to working with Omodei and to assist as part of this initial process, we enclose a document outlining some preliminary guidance regarding the location of potential storage areas and storage sheds. We have enclosed a copy of an aerial photograph of the Port with sketched outline of potential storage areas.

Ports North trust's the information will assist with Omodei's initial mine and business planning and we look forward to discussing more detailed issues down the track, as Omodei develop more firm requirements and needs, in order to utilise Port of Mourilyan.

Yours sincerely,

Michael Capper Business Development Manager PORTS NORTH

Enquiries: Michael Capper, (07) 4052 3845 Email: Michael.Capper@portsnorth.com.au Our Ref: mjc/omodel.tr



Cnr Grafton & Hartley Streets Cairns PO Box 594 Cairns Qld 4870 Australia

Phone +617 4052 3888 Fax +617 4052 3853 Email enguiries@portsnorth.com.au ABN 38 657 722 043 ACN 131 836 014

Far North Queensland Ports Corporation Limited trading as Ports North

www.portsnorth.com.au

#### 1. Port Location

We have supplied an overhead photograph of Mourilyan Port. We have for guidance purposes drawn outlines of some areas that could be developed as potential Magnetite bulk storage areas. These are as close to current wharf as practical. Current vessel movements within the Port are centred around sugar and molasses export and we wouldn't envisage issues with wharf availability based on current demands.

From Ports North meeting in March 2011, initial throughput of Omodei's magnetite export was given as 500,000tpa in 40,000 t parcels. This equates to 13 shipments a year, with one vessel every 28 days. We have highlighted a 120m x 50m block for a 50,000MT holding area and drawn this on the map (see hatched rectangular blocks). Location of the shed on Block 2 (1.1 ha) would enable separation of existing sugar from the dusty magnetite.

Please be aware that as we stated during our meeting, some areas are currently leased to forest product companies over next 2 years or so. However, at point when Omodei are in position to proceed with port storage and export, this can be worked on and will of course require geotechnical investigation and suitable ground works depending on location and desired infrastructure to meet Omodei's needs.

#### 2. <u>Geotechnical Issues: Area 1 & 2</u>

A detailed geotechnical investigation would be required prior to development. However, as a guide, prior geotechnical works undertaken focused on the potential settlements that may result due to loadings from iron ore stockpiles with heights up to 8m.

- The engineered fill placed in 2007 to form areas 1 3 is generally underlain by layers of highly compressible soils that extend down to weathered rock at depth (20m+).
- The thickness of the highly compressible layers increases from north to south and from west to east.
- The expected settlement from large stockpiles will be least for area 1 followed by area 2 then 3
- Northern section pavement deleted and imported fill placed to finished level.
- Southern section filled with general fill and left to consolidate.

#### 3. Storage Shed

If Omodei are wishing to consider shed either as part or full weatherproofing then we can discuss the specifics based on your requirements as part of overall planning. Initial considerations for the undercover storage:

- Shed dimensions 120m x 50m should provide around 50,000 metric tonnes of product storage, at 5m high
- o Loadings needs to be considered in relation to geotechnical investigation of filled areas
- The unloading station may need to be inside the shed and dust control and shed ventilation to be considered. Area 2 is sketched to the likely area m2 required

#### 4. Loading Out

The establishment of an alternative loading system would require a number of issues to be addressed. As a guide these may include but not limited to, wharf capacity, reduced operational wharf length, power supply, clearance with existing and proposed operations on the wharf, conveyor alignment, conveyor route access to the wharf, etc.

#### 5. In Summary - Project Requirements

As a guide it would be necessary for the proponent (Omodei) to consider the following as an outline of some of the steps required for port infrastructure and access:

- Any development would need to comply with the relevant Australian Standards, Building Code of Australia, FNQROC development manuals, standard drawings and specifications and Ports North requirements.
- Proponent will be fully responsible for all capital costs for the development, including any associated upgrading costs to existing Port infrastructure and services.
- Proponent will be responsible for the cost of any capital dredging required to accommodate larger ships to export their product and for ongoing maintenance dredging costs to maintain the harbour and channel at the deeper profile.

