

ACN. 000 317 251

Time lodged with ASX: 1.30pm

## MARKET RELEASE

# 24<sup>th</sup> September 2013

#### **ROCKLANDS COPPER PROJECT (CDU 100%)**

# **LOGISTICS UPDATE**

Three-stage Mill to Market Logistics Chain...

# **Rocklands - Cloncurry - Townsville**

CuDeco's logistics division is responsible for securing access to, and/or developing the required infrastructure to ensure the lowest cost, unimpeded transport of Rocklands products to end-users.

### Stage 1 (Rocklands) - Concentrate Loading Terminal

Concentrate Storage and Loading Facility at the Rocklands Mine Site scheduled to be constructed towards the end of the Process Plant construction phase.

### Stage 2 (Cloncurry) - Multi-user Rail Load Facility (MURLF)

Design of the MURLF has been mostly finalised and the approvals process is nearing completion. It is anticipated site works could commence before the end of 2013.

## Stage 3 (Townsville) - Port of Townsville Storage and Ship-loading Facility

Planning and design for the Port of Townsville Storage and Ship-loading Facility is around 30% complete. A shorter conveyor route was identified during interim design studies and is currently being incorporated into the new designs and should result in considerable construction and operational savings.

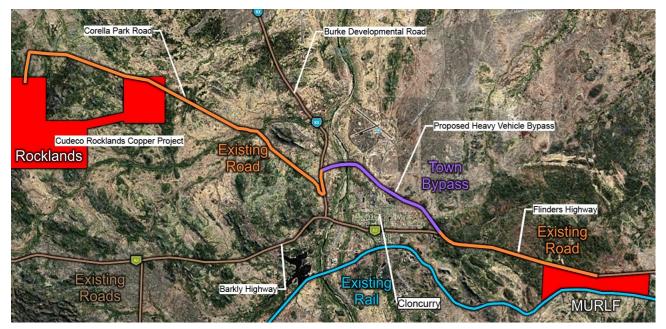


Figure 1: Stage 1 of the mill to market process - road-trains from the Rocklands Mine Site to CuDeco's Multi-user Rail Load Facility east of the township, currently being developed in Joint Venture between CuDeco, Xstrata and Minmetals Group.



#### **CuDeco Three-stage Mill to Market Logistics Train**

# Stage 1

#### Rocklands - Concentrate Loading Terminal

The concentrate Storage and Loading Facility at the Rocklands Mine Site is scheduled to be completed after the Process Plant construction phase.

When fully operational, concentrates from the Mill will be loaded into sealed containers and dispatched by "Type 2" road-trains to the Company's Multi-user Rail Load Facility (MURLF) in Cloncurry.

Containers delivered to the MURLF are unloaded with specialised loaders.



Figure 2: Schematic diagram of typical Type 2 road-train configuration, with specially designed fully sealed containers.

#### Corella Park Road Intersection Upgrade

Designs have been completed for the redevelopment of the main intersection of Corella Park Road and Burke Development Road. Streamlining this entry and exit point will improve access for Road Trains coming and going from the Rocklands Group Copper Project.

The proposed upgrade will significantly increase safety at the existing intersection, and when completed will set the benchmark for future Main Roads upgrades.

Tenders for the work recently closed and a decision is pending on the successful group.

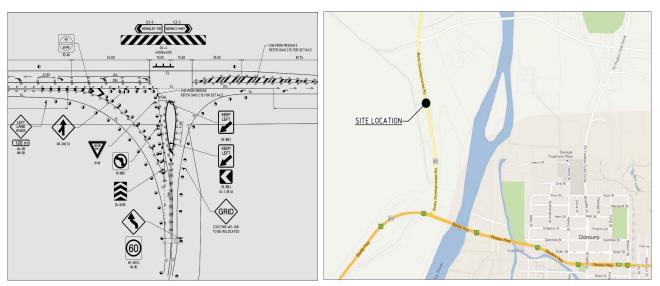


Figure 3: Upgrade of Corella Park Road and Burke Development Road intersection.





Figure 4: View looking west at the Cloncurry Multi-user Rail-load Facility - 3D design model

# Stage 2

### Cloncurry - Multi-user Rail Load Facility (MURLF)

The facility is located approximately 8km east of the major regional township of Cloncurry in North-west Queensland Australia, and forms a critical component of the three stage mill-to-market process facilitating transportation of concentrates from our Rocklands Group Copper Project located approximately 15km west of the township of Cloncurry, to international markets.

Located east, and on the Townsville-side the township of Cloncurry, the Company avoids adding further congestion to the already problematic rail induced grid-locks that occur in the township from time to time due to very long slow-moving trains, shipping concentrate through the middle of town, from facilities owned by other operators to the north and west of the township.

Design of the MURLF has been mostly finalised and the approvals process is nearing completion. It is anticipated site works may commence before the end of 2013.

The Cloncurry MURLF is capable of processing up to 4 million tonnes of mineral concentrates per annum from CuDeco's 100% owned Rocklands Group Copper Project, and provides access to the Port of Townsville via the Queensland Rail network.

View 3D animation of the Facility; www.cudeco.com.au/presentations.asp



Figure 5: Loading of sealed containers at the Cloncurry Multi-user Rail-load Facility - 3D design model



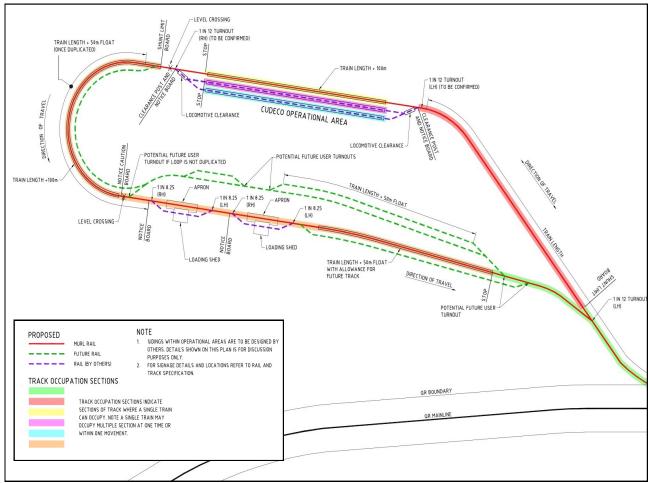


Figure 6: Current design layout showing CuDeco's operational area highlighted at the top of the image. North is up the page and the township of Cloncurry is to the left.



Figure 7: Rail transport route from the Multi-user Rail Load Facility (MURLF) to Townsville



# Stage 3

### Townsville - Port of Townsville Storage and Ship-loading Facility (POTSF)

CuDeco's POTSF includes storage capacity of up 400,000 tonnes of mineral concentrates and includes an associated Ship-loading Facility capable of loading concentrates at the rate of 2,000 tonnes per hour. The Ship-loading facility provides access to international markets and completes the final stage of the Company's three-stage mill-to-market cycle.

Planning and design for the Storage and Load Out Facility is around 30% complete. A shorter conveyor route was identified during interim design studies and is currently being incorporated into new designs that should result in considerable construction and operational cost savings.

Concentrates are tipped from containers into the storage shed. Concentrates are then transferred to the berths via overland conveyor and loaded into ship via mobile ship loader at a rate of 2000tph.

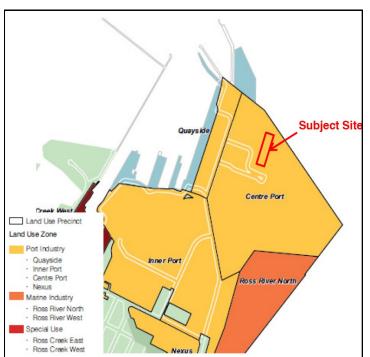
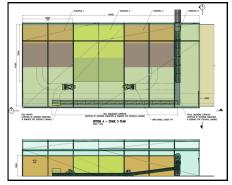
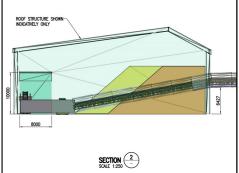




Figure 8: CuDeco Port Facility in close proximity both berth areas.

Figure 9: Location of Port Facility existing rail loop





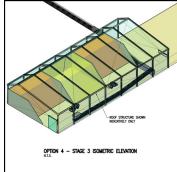


Figure 10: Plan, section and isometric views of CuDeco Port of Townsville Storage Facility showing compartmentalised concentrate storage and materials handling layout including internal conveyor system.



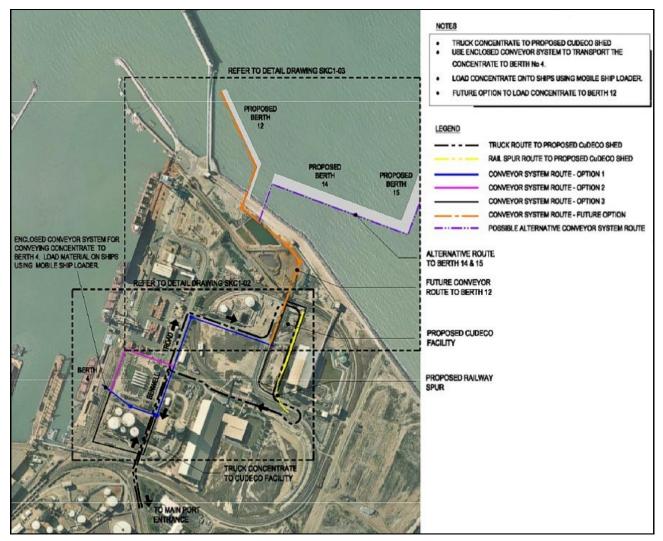


Figure 11: Plan of Conveyor System and transport route.

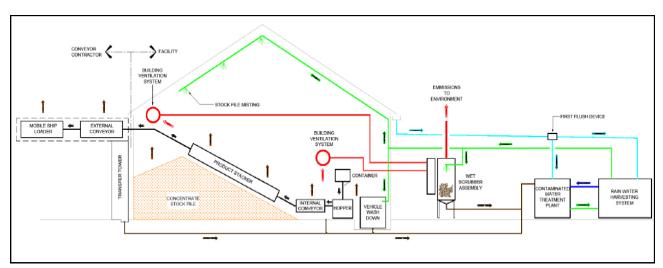


Figure 12: Conveyor System - Environmental Impact Statement



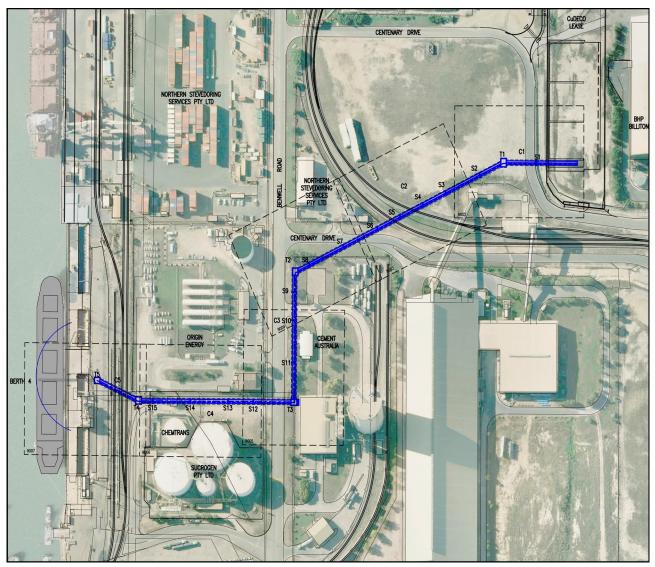
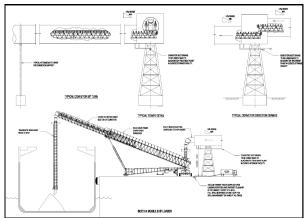


Figure 13: Proposed plan for the Stage 1 conveyor system to Berth 4



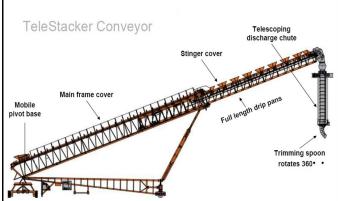


Figure 14: Conveyor System and Ship-loader at Berth 4



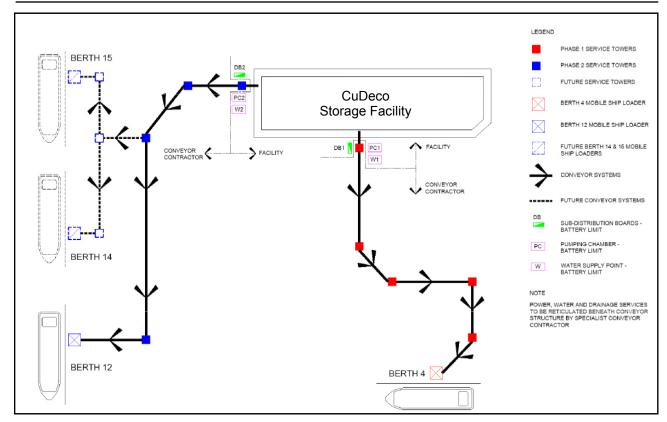


Figure 15: Conveyor System Diagrammatic

#### Technical Consultants who have had input on the Port Facility designs to date include;

- Robert Bird Group
- RPS
- ARG
- Coffey Geotechnics
- Norman Disney and Young
- LCJ
- Mobile Conveyor Services

Tracey Lines Consulting Phronis Material Handling ML Design Architects Rider Levett Bucknall QS Certis Certifiers Rowlands Surveyors





Figure 16: Aerial views of existing Port of Townsville facilities



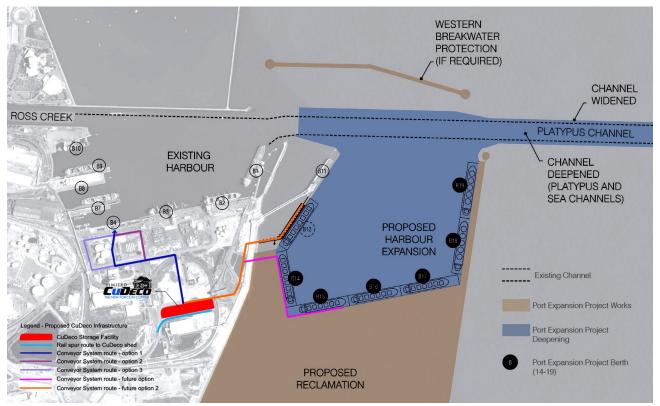


Figure 17: Port of Townsville - Port Expansion layout, with proposed CuDeco infrastructure shown, including temporary Berth 4 loading areas and option for possible proposed future locations of Berths 12, 14 and 15.

The CuDeco Site is surrounded by similar Facilities including BHP's Storage facility to the east. Proximity of site is well positioned for Berth 4 (temporary) and future ship loading options at proposed future Berths 12, 14 or 15.

On Behalf of the board - ends