



# Iluka Resources Mid West Institutional Presentation

March 2012

# Agenda

- History of Mid West Operations
- Key Features of the Mid West mineral sands operation
- Mining and Processing Overview
- Medium term plans – possible configurations

## Forward-looking Statements

This presentation contains information that is based on projected and/or estimated expectations, assumptions and outcomes. These forward-looking statements are subject to a range of risk factors associated, but not exclusive, with potential changes in:

- exchange rate assumptions
- product pricing assumptions
- mine plans and/or resources
- equipment life or capability
- current or new technical challenges
- market conditions
- management decisions

While Iluka has prepared this information based on its current knowledge and understanding and in good faith, there are risks and uncertainties involved which could cause results to differ from projections. Iluka shall not be liable for the correctness and/or accuracy of the information, nor any differences between the information provided and actual outcomes, and furthermore reserves the right to change its projections from time to time.



# Iluka's Mid West History

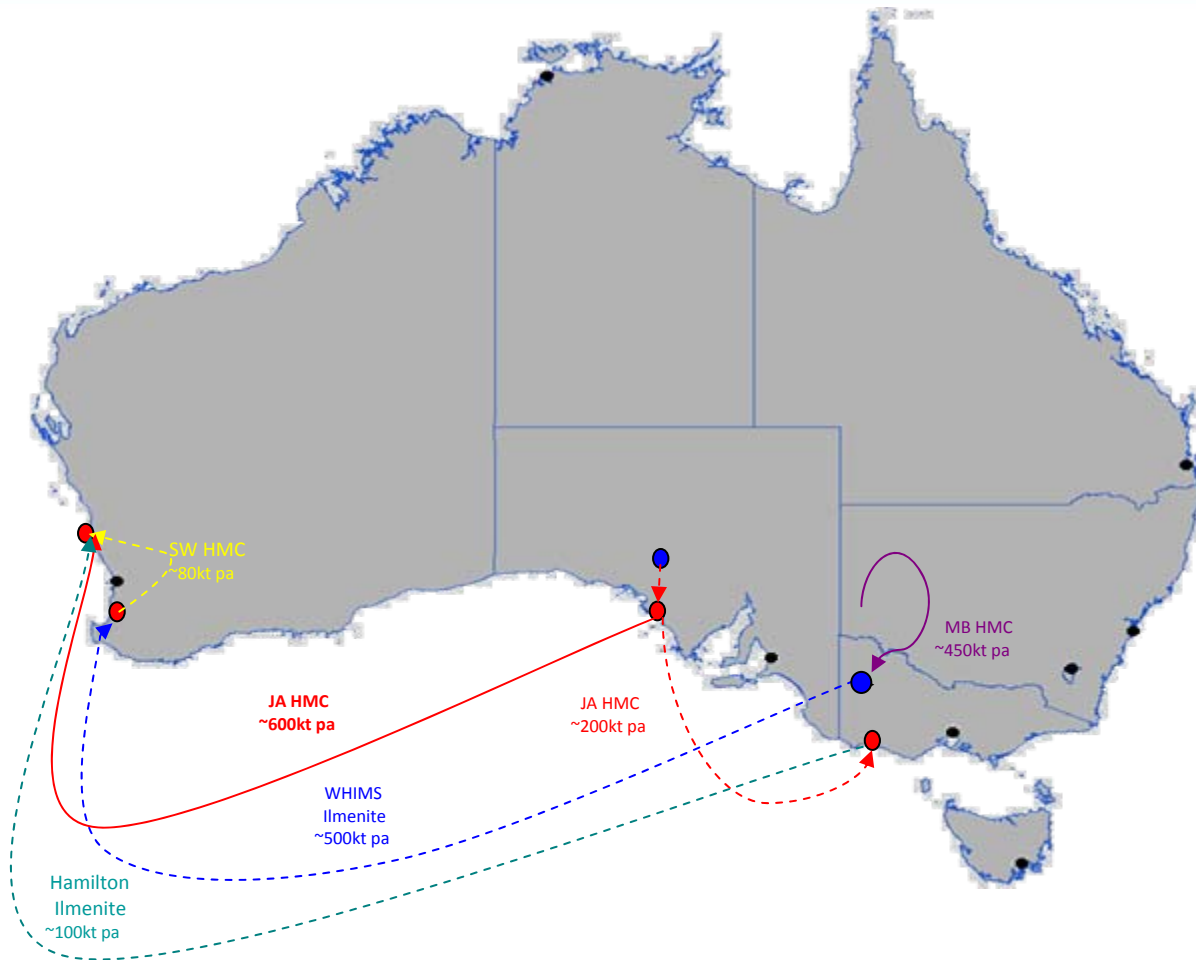
- 1970 Heavy mineral sands discovered at Eneabba (Resource defined)
- 1974 Jennings Mining Ltd commenced at Eneabba – 1976 MSP operational (Narngulu)
- 1975 Allied Eneabba Limited commenced mining at Eneabba
- 1976 Western Titanium Ltd commenced at Eneabba
- 1977 Western Titanium --> AMC
- 1978 AMC acquired Jennings
- 1986 AMC acquired Allied Eneabba
- 1987 AMC commissioned SR plant Narngulu – C Line (SR3)
- 1990 Minerals Separation Plant 2 on the back of Eneabba West Development
- 1991 SR D line commissioned (SR4)
- 1992 AMC acquired by RGC Minerals Sands Ltd
- 1994 SREP technology commissioned on SR3
- 1998 RGC & WSL merge --> Iluka
- 2005 Gingin Mine commissioned
- 2009 Gingin Mine Closed / Eneabba South Mine Idled / SR4 Idled
- 2010 Eneabba North mine idled
- 2011 *Eneabba Mining restarted*



# Mid West Operations - Features

- **High quality, long life reserves and resources at source**
  - Eucla Basin: 6.4Mt of HM @ 50% zircon, 33% I+R (proved + probable reserves)
  - Mid West (including Cataby) : 13.3Mt of HM, 54% Ilmenite, 16% R+Z (proved + probable reserves)
- **Unique processing and logistics flexibility**
  - multiple feed stock and raw materials delivery mechanisms-> rail, road, ship
  - highly flexible range of processing options
  - wide and varied TiO<sub>2</sub> and zircon product suite
  - export (Geraldton Port) facilities relatively unconstrained, with long term access
- **Lean and efficient organisation**
  - a high production turndown ratio, with low overhead
  - skilled and experienced workforce
- **Large scale zircon production facility**
- **Idle capacity for growing market demand**
  - SR4 idled in 2008: with low lead time re-start
  - MSP operating well below rutile and ilmenite constraints
  - South Secondary Concentrator configured for addition mining operations
- **Innovation**
  - New products in the last 12 months (SR85), first trials of ASSR in 2011
  - SREP "Lite" in 2012
  - Ultra-high grade SR planned for H2 2012
  - Advancements in MSP automation and control, currently with patent pending.

# Iluka's Integrated Australian Operations



- Existing flows are solid lines
- Emerging /expanding flows 2012 onwards dotted lines

# Recent Business Developments

(Eneabba Mine re-start)

- Eneabba idled in mid 2010
  - partly in response to GEC conditions, lower ore grades and expiry of long term TiO<sub>2</sub> contracts
  - **but** prime focus: substitution of higher margin J-A feedstock through existing facilities
- Resumption of mining driven by supply constrained TiO<sub>2</sub> markets
  - provides incremental value without displacement of high margin production
  - Board approval of \$36 million in July 2011
  - Twin Hills and Depot Hill North ore bodies mined over 3 years
  - \$12.9m of development, refurbishment and infrastructure investment at Eneabba
  - **mining resumed in December 2011**
- SR3 major maintenance outage to provide minimum 3 year campaign duty
  - \$9.5m on fixed plant refurbishment, \$6m on waste dam construction
  - **executed in Q4 2011**
  - based on +50ktpa SREP, 50ktpa SR85, 20-30ktpa standard grade SR
- MSP upgrade with base load of J-A HMC at +700ktpa with +300ktpa Eneabba HMC
  - \$7.0m of new equipment to de-constrain zircon circuit with +700ktpa of J-A HMC
  - 25ktpa of additional zircon capacity provided
  - additional 25ktpa of rutile and 140ktpa of SR feed ilmenite within existing capability
  - **works completed and new circuits operational in December 2011**

# Future Mine Development

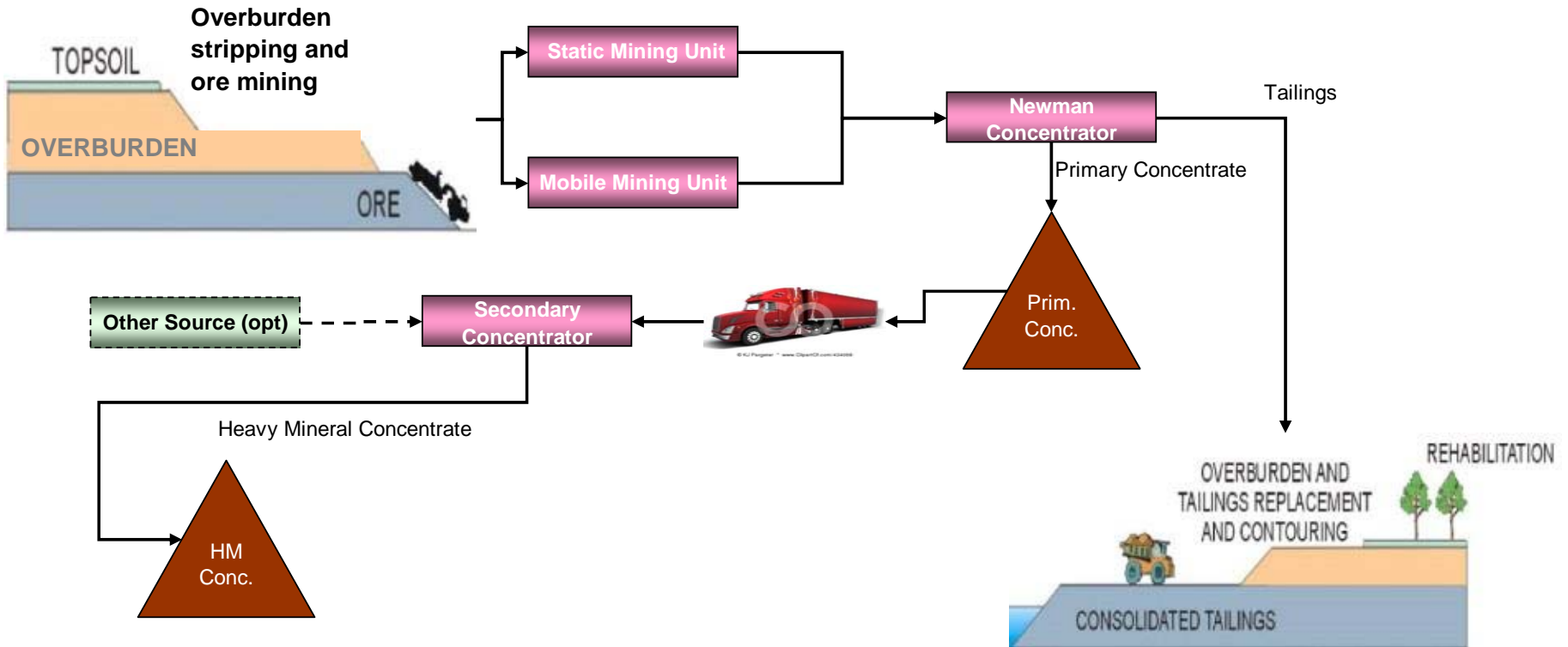
(Eneabba Extension)

- Current Mine Plan
  - Twin Hills and Depot Hill North
  - Mining completed end of 2014
  - Aligns with the completion of SR3 campaign
  
- Future Ore reserves
  - IPL North 2.8mt of HM 42% Ilmenite 15% R+Z (probable),
    - High TiO<sub>2</sub> ilmenite orebody
    - Significant zircon and rutile credits
    - DFS and full approval target in early 2014 for commencement of mine development
  - North Mine extension targets
    - Depot Hill North extension, Depot Hill East
    - Other resources under development
    - Provide supplement to IPLN base load at small incremental cost
  - South Tails and Allied Tails
    - High quality zircon orebody
    - Second concentrator option for Eneabba
    - Targeting production in 2016
    - Delivers a boost in mineral production for Iluka group plan
  
- Value Adding Opportunities
  - Processing options fall within current MSP nameplate
  - Provides opportunity to increase SR production through SR4 re-start or extend SR3 beyond LOM
  - Allows higher utilisation of Hamilton MSP zircon circuit with some diversion of JA HMC to Hamilton



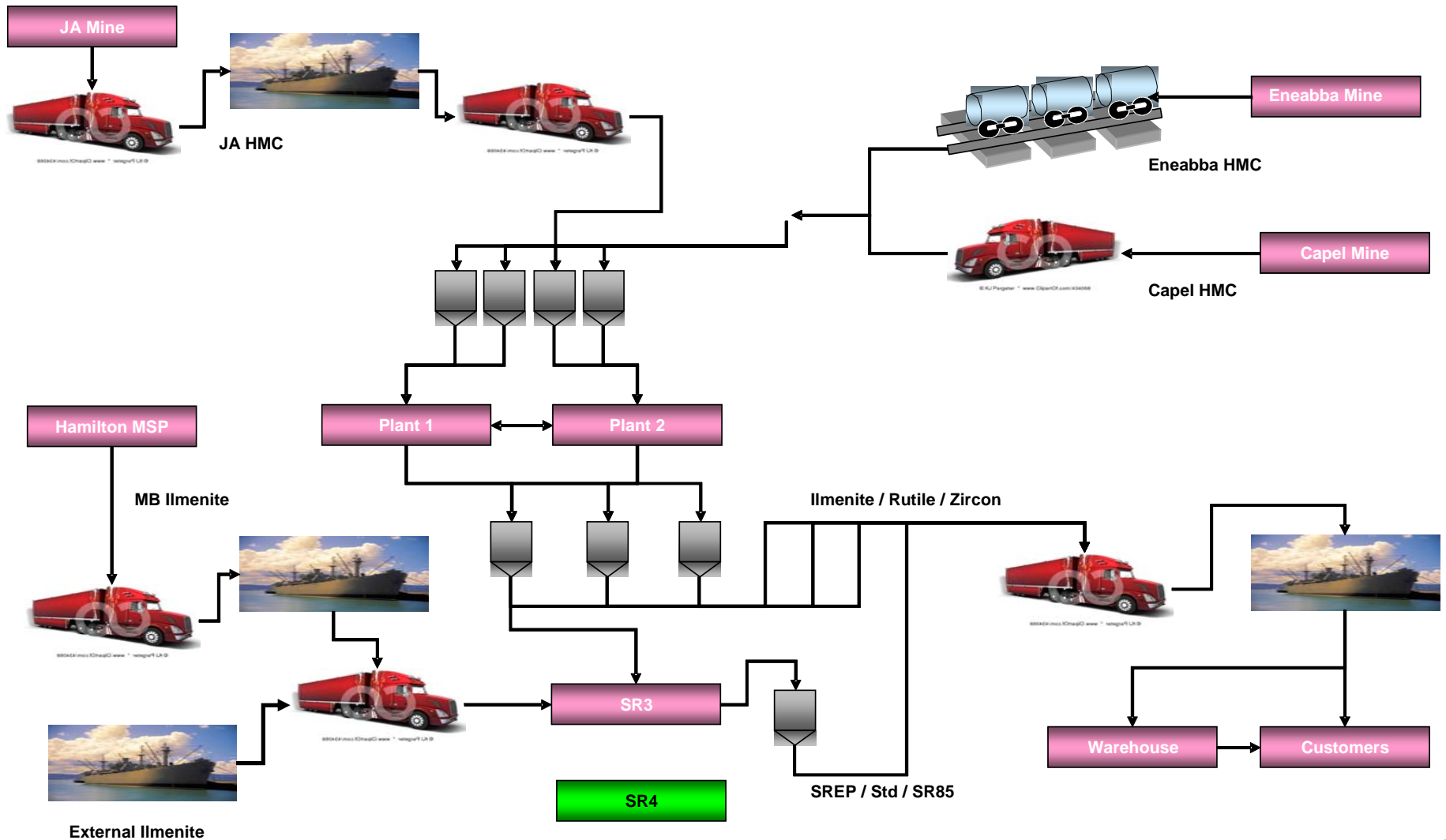
# Eneabba Overview

(similar operation to J-A mine in South Australia)



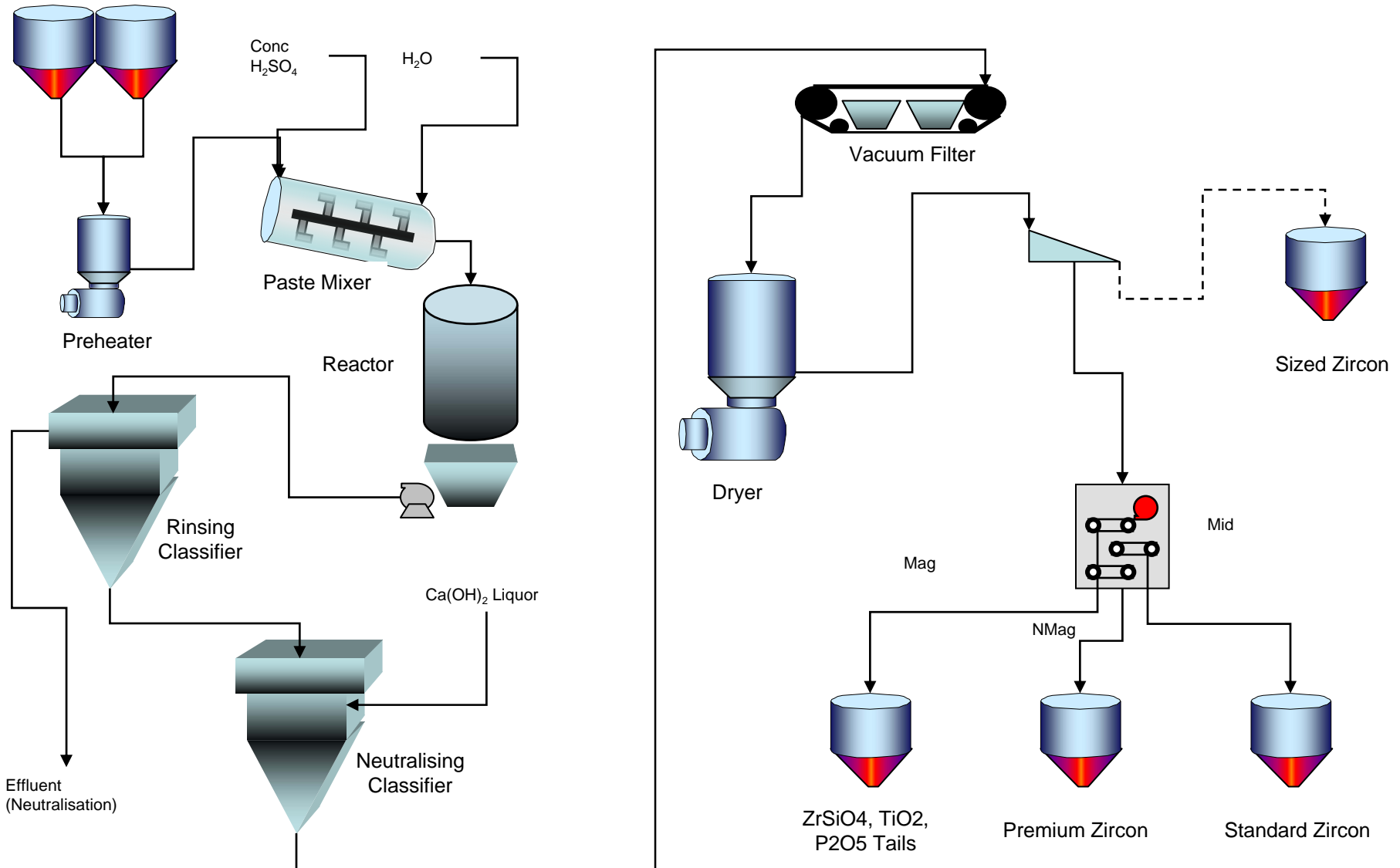
# Narngulu Logistics Overview

(Feed stock and finished goods)

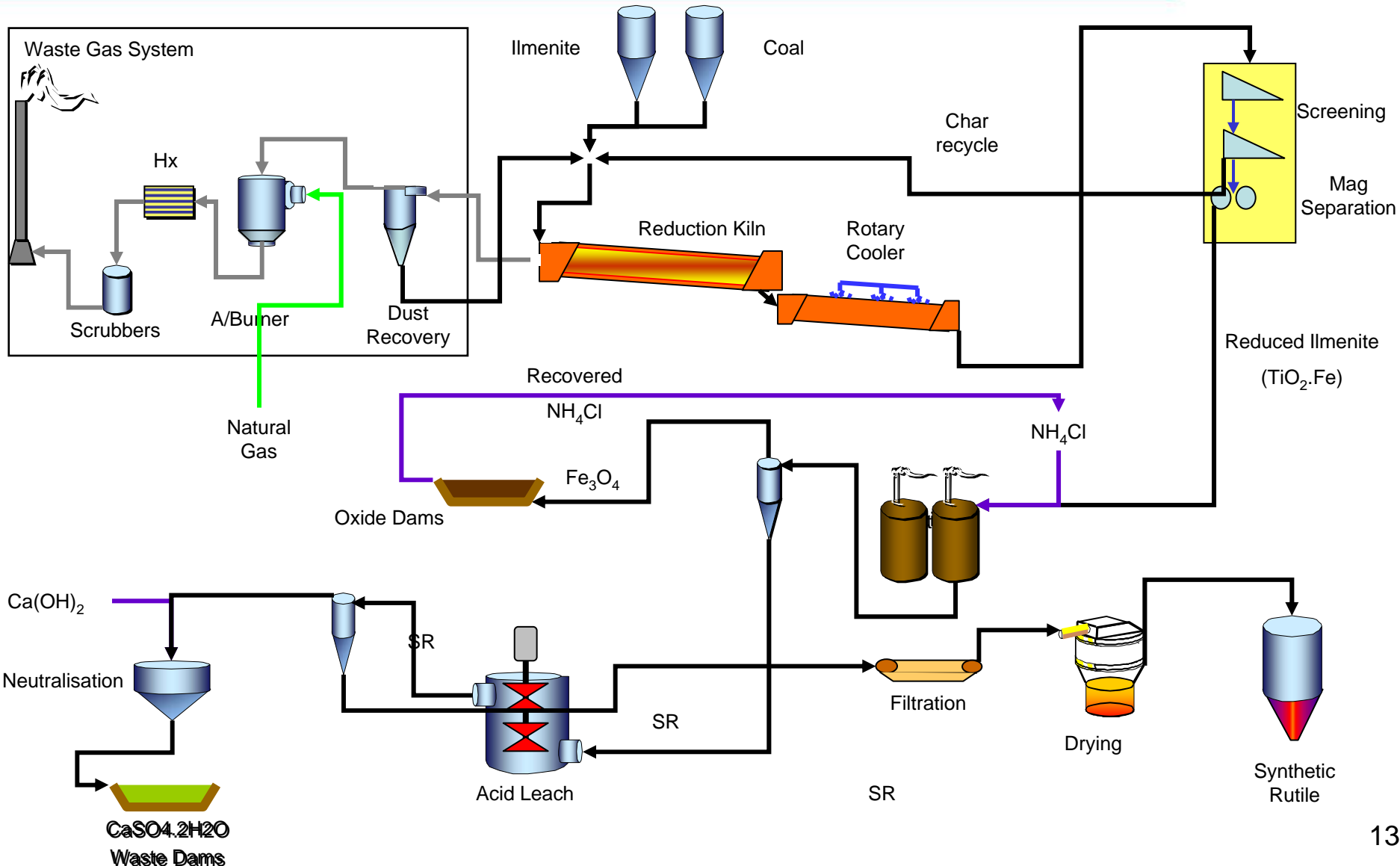




# Zircon Finishing Plant (ZFP)



# SR3 Process (Becher)



# Iluka Mid West – Future Plans

(business configurations)

- **Eneabba extension and expansion potential**
  - forms part of Iluka's Enhanced Production Project
  - up to 10 years on current reserves
  - majority of reserve on State Agreement tenements
- **Cataby mine developments**
  - accelerated timeline (early 2014 commencement)
  - large synthetic rutile ilmenite feed source; associated zircon stream
  - production split between Mid West and South West
- **SR3 operation expected beyond initial campaign to 2014**
- **SR4 re-start**
  - based on assessment of market conditions and appropriate economic outcomes
  - IPL North identified as the resource to provide feed stock
  - potential for feed source to be sourced from Murray Basin
  - potential for 1 or more kilns to be devoted to new products (e.g. ASSR) if successful