



ASX Release

11 September 2012

SERENJE PROJECT – PROCESSING OPTIONS ANALYSIS

Zamanco Minerals Limited (ASX: ZAM; “Company”) is pleased to announce that it has received the final report from Pyrocon for the Options Analysis that it commissioned earlier in the year for the proposed Serenje Manganese Project in Zambia.

Executive Summary

Highlights

- Pyrocon has confirmed that high carbon ferromanganese may be produced by either the smelting of high grade manganese ore with iron units or via a combination of high and low grade manganese ore, which is found in Zambia;
- The study indicates that the conversion of high carbon ferromanganese (HC FeMn) to medium carbon ferromanganese (MC FeMn) by oxygen or steam blowing would deliver a significantly higher operating margin, however would require additional capital expenditure;
- The production of Silica Manganese (SiMn) in an electric arc furnace from HC FeMn slag and high grade manganese ore is also an attractive option;
- The study shows that the various furnaces can be used to produce different alloys, as and when market conditions change, thus providing flexibility for production going forward.

Study Implications

- The Pyrocon Options Analysis confirms the robust economics of the proposed Serenje Manganese Project.
- It confirms that the power and ore feed requirements are in line with the Zamanco forecasts.
- The Options Analysis has shown that it is possible to develop a project that can produce HC FeMn, MC FeMn and/or SiMn as conditions in the market fluctuate with little or no change to the configuration of the plant.

Jacques Badenhorst, Managing Director, commented *“The study sheds new light on the potential multiple product streams that could be produced at Serenje, dependant on market conditions. The results of the study will be incorporated into the proposed Bankable Feasibility Study for the Serenje Manganese Project, which is expected to commence in the next quarter.*

Background

Pyrocon in conjunction with EPS, an associated company was commissioned by Zamanco to investigate different process routes for the downstream processing of manganese ore in Zambia. As the Company has already investigated various limiting factors such as power, haulage and sea transport, the study was based upon the premise of the production of 60,000tpa of high carbon ferromanganese and 12,000tpa of manganese metal.

Pyrocon was asked to investigate the economics of producing HC FeMn as well as looking at the various other alloys that can be produced from HC FeMn. These included MC FeMn, low carbon ferromanganese (LC FeMn) and SiMn. The scope included the determination of the various plant requirements for these various options as well as the amounts of consumables required for each option.

An assessment was undertaken of the various furnace technology that is available and its suitability for a project of this scale. It reviewed AC vs DC technology and the environmental, safety and performance issues of each technology.

Study Results

The intention of the option study was to evaluate several process routes in order to determine which are more favourable. These high level selection criteria will be used to generate the scope for further studies or to define the constraints for product selection as part of a Bankable Feasibility Study. The option study has identified several areas where additional work is required to ensure that project and operational risk is mitigated. The most important is complete ore characterisation including beneficiation, calcining (if required) and smelting tests.

In order to produce any other ferromanganese alloy products it is necessary to first install a HC FeMn smelter. The design intent is for three small furnaces to be constructed followed by adding a converter section for the production of MC FeMn as well as an additional small smelter for the production of SiMn. Initial start-up will produce a HC FeMn product allowing other products to follow in the next phases of the project.

The converter route producing a medium carbon ferromanganese (MC FeMn) product shows the most favourable operating cost value addition. This however must be weighed against the initial capital investment of a converter and associated peripherals to be determined.

The furnace design can be optimised so that it is possible to produce both HC FeMn and SiMn from the same furnaces which allows flexibility in the final product depending on market requirements.

The following process routes were investigated:

1. High Carbon Ferromanganese (HC FeMn)

- a. The first option includes the use of a HG ore and addition of iron scrap to supplement the shortage of iron units. Iron units can alternatively be supplemented by iron ore.

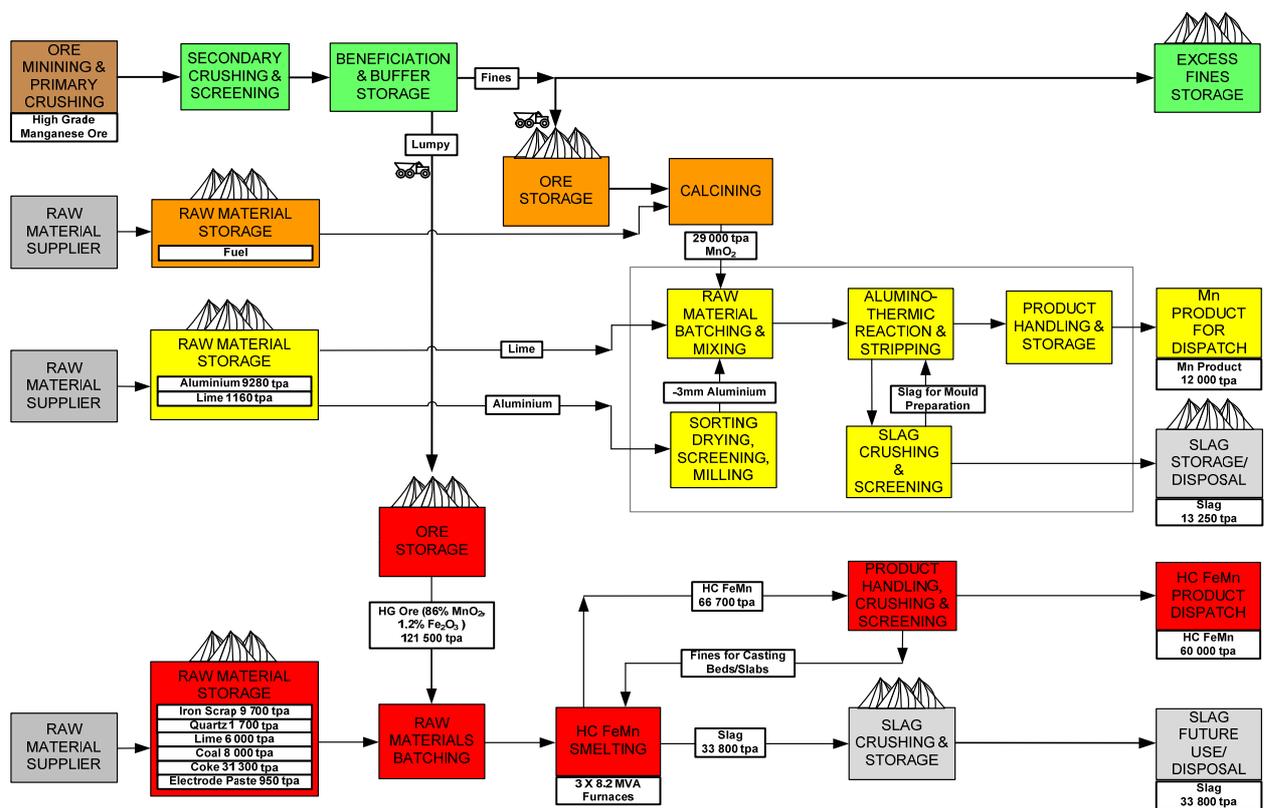


Figure 1a – HC FeMn production from HG ore and scrap iron.

- b. The second option includes the use of HG ore together with an iron rich LG ore to eliminate the use of iron scrap additions.

2. Medium/Low Carbon Ferromanganese (MC/LC FeMn)

- a. The first option is to install a converter and to convert HC FeMn to MC and/or LC FeMn by oxygen blowing.

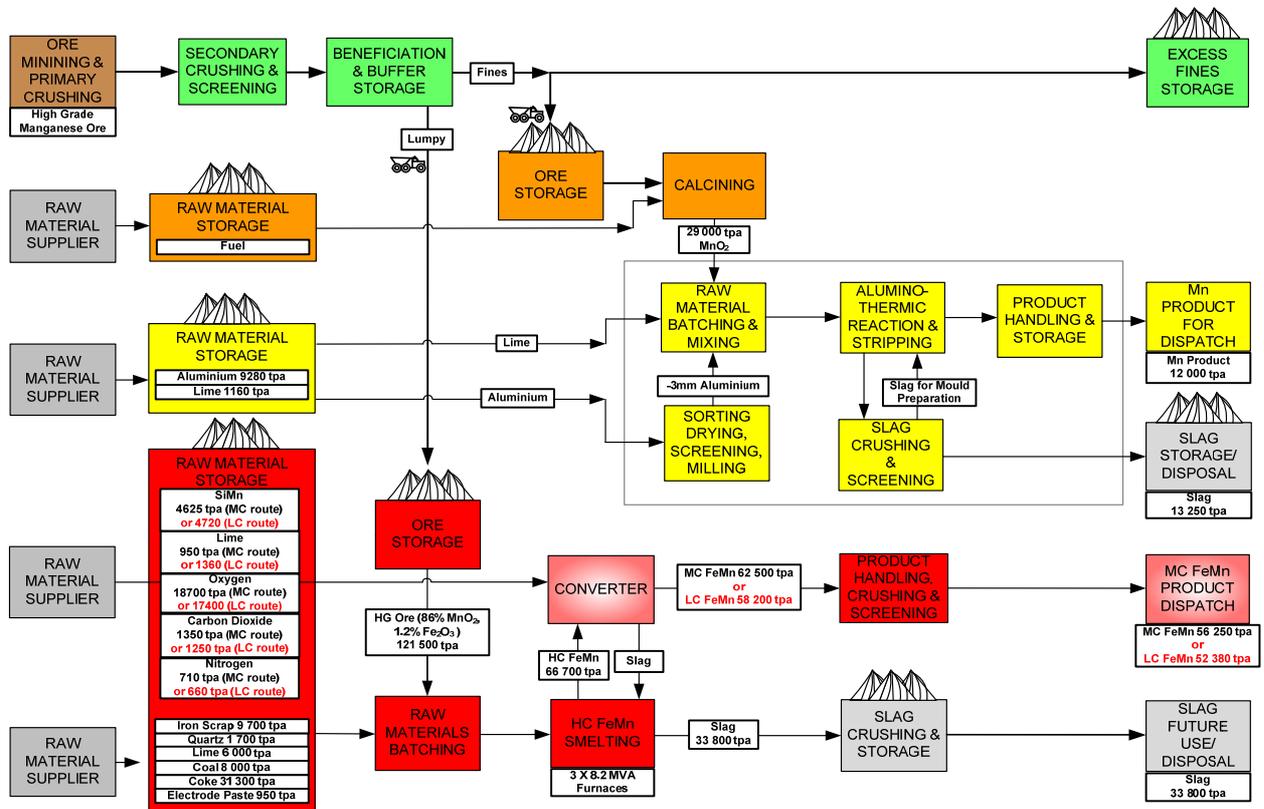


Figure 2a – MC FeMn or LC FeMn production with a converter

- b. The second option is to utilise SiMn and the mixing of a lime ore melt in a ladling process called the Perrin process.

3. Silicomanganese (SiMn)

This option utilises the HC FeMn slag with HG ore addition to produce SiMn.

4. Manganese (Mn)

Metallic manganese production by aluminothermic reduction is a licenced process under third party scope.

For the production of HC FeMn, the study found that it would require 121-141ktpa of ore to produce 60ktpa of HC FeMn, depending if option 1a or 1b was implemented.

For the proposed subsequent conversion of HC FeMn to MC/LC FeMn, the study showed that the 60ktpa of HC FeMn could be converted into 56ktpa of MC FeMn or 52ktpa of LC FeMn. This was shown by the authors to be quite important as although it would result in 7% less product per annum, the MC FeMn price is significantly higher than that for HC FeMn (currently 60% higher), which would outweigh the loss of volume. The study indicated that a converter would be required to produce MC FeMn and that further work was required to determine the cost-benefit analysis of the additional capital required. For the production of SiMn, it was indicated that it would be possible to produce SiMn using the same furnaces as the HC FeMn whilst utilising the slag from HC FeMn as the ore feed. Pyrocon estimated that 9.5ktpa of SiMn could be produced from the waste slag product and the addition of 4,200tpa of high grade manganese ore. It is estimated that the value of the production of SiMn was comparable to the value of the production of HC FeMn.



Jacques Badenhorst
Managing Director

Certain information in this announcement refers to the intentions of Zamanco Minerals Limited, but these are not intended to be forecasts, forward looking statements, or statements about future matters for the purposes of the Corporations Act or any other applicable law. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause Zamanco Minerals Limited's actual results, performance or achievements to differ from those referred to in this announcement.