

9 April 2021

UPDATE ON MOUNT PEAKE FRONT-END ENGINEERING AND DESIGN STUDY FOR THE BENEFICIATION PLANT AND TIVAN® PROCESSING FACILITY

Key Points

- SMS Group ("SMS") has now provided the key deliverables of the Front-End Loading ("FEL")-3 for the Darwin TIVAN® Processing Facility ("DPF"), under the FEED agreement.
- SMS has advised that ongoing COVID-19 restrictions and lockdowns in Germany and Austria as well as travel
 bans imposed by the Australian Government have impacted certain testwork-based deliverables of FEL-3
 for the DPF. These are being addressed with expected delivery and completion during the coming months.
- FEL-3 for the Beneficiation Plant for the Mount Peake mine site has already been completed and delivered by SMS (as advised on 15 March 2021) and reviewed in detail by TNG's technical team.
- The Beneficiation Plant has been designed to process up to 2.1 Mtpa of titanomagnetite ore and produce up to 0.7 Mtpa of magnetite concentrate.
- The magnetite concentrate produced by the Beneficiation Plant is planned to be transported to the DPF for processing into vanadium pentoxide, titanium pigment and iron oxide fines for global export.
- The indicative FEED capital cost for detailed engineering, procurement and construction of the Beneficiation Plant has been estimated at \$146M (+/-10%), including contingency, subject to finalisation of the delivery proposal.
- The execution plan for the Beneficiation Plant will now be finalised, allowing TNG and SMS to complete the commercial process for the delivery of firm contract pricing.
- TNG and SMS will now develop an enhanced, final project execution model to optimise capital expenditure for the Mount Peake Project.

Further to the project update provided on 15 March 2021, Australian resource and mineral processing technology company TNG Limited (ASX: TNG) ("TNG" or the "Company") is pleased to advise that the majority of the Front-End Engineering and Design ("FEED") study for both the Beneficiation Plant and the TIVAN® Processing Facility which form part of its 100%-owned Mount Peake Vanadium-Titanium-Iron Project ("Mount Peake Project" or "Project") in the Northern Territory, has now been delivered by SMS group and is under review by TNG's Project Team.

The Company appointed German-based metallurgical engineering firm SMS group to undertake the FEED study for the Mount Peake Project for both the proposed mine site Beneficiation Plant and TIVAN® Processing Facility in Darwin ("DPF").

While the overall FEED study is now nearing completion with the FEL-3 for the Beneficiation Plant at the mine site having been completed and delivered and the FEL-3 for the DPF in its final stages, Germany and Austria have been recently affected by a third COVID-19 lockdown, which has impacted certain testwork deliverables for this final component of the FEED study.





TNG's Managing Director & CEO, Paul Burton, said:

"With the Non-Process Infrastructure design work now completed together with the beneficiation plant for the mine site and most of the deliverables for the Darwin TIVAN® Processing Facility, we now have most of the design and engineering information required for the Mount Peake Project, on which our technical team can start their detailed review.

"In parallel, we are fully engaged with the Northern Territory Government agencies to complete final permitting and approvals for the Project, including engagement with the Northern Territory Environment Protection Authority for approval of the Environmental Impact Statement for the Processing Facility in Darwin.

"We are looking forward to the next execution phase and project finance, where options are being considered for the most appropriate delivery of the Project."

Darwin TIVAN® Processing Facility

SMS has provided the majority of the FEL-3 deliverables and associated documentation and design for process related scopes of the DPF to TNG, which is now being reviewed by the Company's technical team. These include:

- Equipment List;
- Logistics Concept;
- Major Equipment Specification;
- Detailed Process and Instrumentation Diagrams (P&IDs);
- Detailed Plot Plans and Arrangements;
- Detailed Process Description;
- Validation Testwork Program; and
- 3-D process and plant model.

SMS has advised that due to the recent escalation of COVID-19 restrictions in Europe, delay in the finalisation of validation testwork at the SMS laboratories in Austria has impacted some deliverables for the completion of the FEED study by the agreed date. SMS will provide the final FEED study report for TNG's technical review once validation testwork is completed.

Following receipt and review of the final complete FEL-3 report for the DPF, the full commercial phase will then be executed in support of formal proposals for the delivery of the Beneficiation Plant and the DPF.

In parallel, TNG and SMS will engage in an optimisation of the Project execution model, the Project sourcing strategy and the final delivery scopes among potential contractors, as well as any value engineering works to explore cost saving options identified by TNG during review of the FEL-3 reports.

Beneficiation Plant

As part of the FEED study, SMS engaged Perth-based Como Engineers to deliver a study for the design, procurement and construction of the Mount Peake Beneficiation Plant. The Beneficiation Plant was designed by Como Engineers to process up to 2.1Mtpa of titanomagnetite ore, with the aim of producing up to 0.7Mtpa of vanadium- and titanium-bearing magnetite concentrate for further processing at the DPF.

The Beneficiation Plant has been designed to produce a consistent high-quality magnetite concentrate within the specification range required for processing at the DPF. The design has been based on extensive metallurgical testwork, with results informing the final design of the Beneficiation Plant flowsheet (see Figure 1). The Beneficiation Plant will use conventional technology and will comprise crushing, grinding and classification, magnetic separation, dewatering of magnetite concentrate and dewatering of tailings.



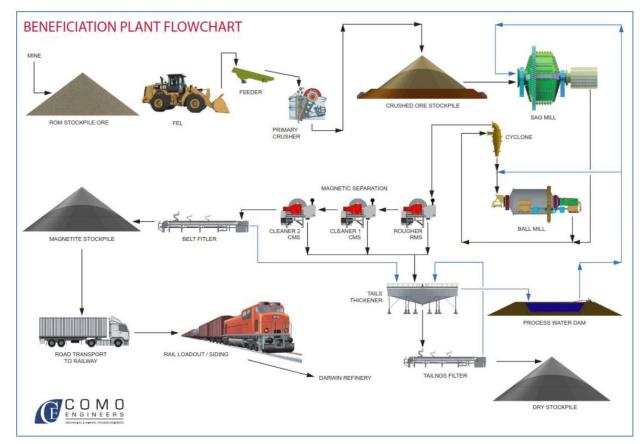


Figure 1. Process Block Flow Diagram

The deliverables for the Beneficiation Plant FEED Study included:

- Technical specification for surface treatment;
- Equipment and vendor lists;
- Laboratory Equipment list and specifications;
- Piping design criteria and specifications for valves and rubber lining;
- Instrumentation list;
- Electrical load list;
- Utility infrastructure list;
- Heating, ventilation and air conditioning (HVAC); and
- Workshop equipment list.

An indicative capital cost estimate has been prepared by Como Engineers for the Beneficiation Plant as part of the FEL-3 phase. The capital cost estimate, including all direct and indirect costs, is approximately \$146M (+/- 10%). The estimated capital costs include all of the following (see Figure 2):

- Installation of the plant at the Mount Peake mine site as per the flowsheets and equipment list, inclusive of all labour, cranage, transport and materials;
- Concrete;
- Bulk earthworks for the plant including:
 - o ROM Wall,
 - Plant Roads and sheeting, and
 - Drainage & storage ponds;
- Site office and operating buildings;
- Electrical & instrumentation;
- All equipment selected from preferred vendors, including major items:
 - SAG & Ball Mills,
 - Magnetic Separation,
 - Magnetite Belt Filter,



- Tailings Thickener, and
- Tailings Filters;
- Structures and platework; and
- Pipework.

The FEL-3 capital cost estimate is indicative only and remains subject to completion of a formal tender process for delivery of firm contract pricing.

In addition, Como Engineers has provided an indicative "owner's cost" estimate of \$4.3M for first fills, commissioning spares, and warehouse and critical spares, which is subject to finalisation and formal tendering.

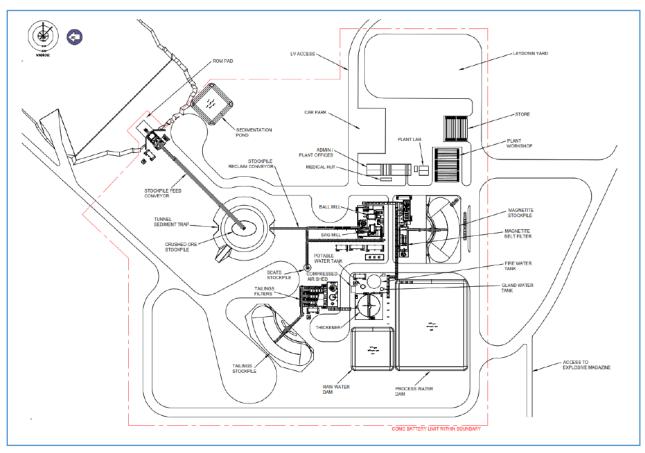


Figure 2. Site layout

Cost estimates for the Beneficiation Plant FEED study were based on vendor supplied quotations and estimates derived from the 3-D Plant model, and incorporated available details for key major equipment. The costs presented have been estimated to an overall accuracy of +/-10% which is commensurate with the level of cost investigations and technical effort undertaken in this final stage of the FEED study.

The contingency applied to all capital items varies between 5 and 17%, with an average of 13.6% of final determined costs.

Execution options for the Beneficiation Plant are being finalised in support of the commercial tender process ahead of securing contracts for plant delivery.

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About TNG

TNG is a Perth based resource and mineral processing technology company focussing on building a world-scale strategic metals business based on its flagship 100%-owned Mount Peake Vanadium-Titanium-Iron Project in the Northern Territory. Located 235km north of Alice Springs, Mount Peake will be a long-life project producing a suite of high-quality, high-purity strategic products for global markets including vanadium pentoxide, titanium dioxide pigment and iron ore fines. The project, which is expected to be a top-10 global producer, has received Major Project Facilitation status from the Northern Territory Government.

Forward-Looking Statements

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