

**20 March 2001**

## **PROJECT REVIEW**

Austpac's objective is to use its ERMS and EARS technologies to become a significant producer of high-grade synthetic rutile for the TiO<sub>2</sub> pigment market. Our projects have significantly advanced since the publication of the 2000 Annual Report, so it is appropriate to update shareholders with a summary of these developments.

### **AusRutile Project, India**

- In late 2000 Austpac, Tigor Limited and Indian Rare Earths Limited (IRE) formally agreed to proceed with the AusRutile India Private Limited Joint Venture. Austpac and Tigor each hold a 37 % interest in AusRutile and IRE has a 26 % interest. AusRutile's ultimate objective is to use Austpac's ERMS and EARS technologies to develop a world-class synthetic rutile facility based on a large, high-grade mineral sand deposit at Chatrapur in the state of Orissa.
- AusRutile initially plans to build a 10,000 tpa fully integrated synthetic rutile plant at Chatrapur. AusRutile's plant will be adjacent to IRE's OSCOM project, which is currently exploiting the southern end of the Chatrapur deposit, primarily producing ilmenite, rutile and zircon. The resource at Chatrapur is sufficiently large to support the production of 200,000 tonnes for over 30 years. Once the 10,000 tpa plant has demonstrated the commercial viability of producing high-grade synthetic rutile (>96 % TiO<sub>2</sub>), the AusRutile joint venturers envisage expanding operations, ultimately up to 200,000 tpa. AusRutile will initially purchase ilmenite from IRE for the 10,000 tpa plant, but the joint venture arrangements give AusRutile access to sufficient resources to support a large synthetic rutile production facility.
- Austpac is managing the feasibility study, and has appointed Mr John Downie as General Manager - Project and Technology Development to oversee this work. Mr Downie has over 30 years experience in international project development and management.
- The feasibility study for the 10,000 tpa plant is well advanced, and project expenditure is now in excess of \$1million. Test work at Austpac's pilot plant at Newcastle on the EARS acid regeneration process has been completed, and the ERMS test work will be completed this month. Ausenco Limited of Brisbane is undertaking the engineering design and costing for the study, and Jacob's H & G of Mumbai, India, is providing local support for infrastructure, construction and environmental aspects. The feasibility study is scheduled for completion in July this year. AusRutile intends to commence construction during the second half of 2001, with production commencing in the second half of 2002.

- The 50/50 Austpac-Ticor Joint Venture was formed in July last year to develop synthetic rutile projects on a worldwide basis. The AusRutile project is the first such project. Under the joint venture, and at Austpac's election, Ticor will fund Austpac's share of any project development by way of a project loan. Ticor has now reimbursed Austpac for expenditure on the AusRutile project incurred since March 2000, and Ticor will continue to fund Austpac's share of the 10,000 tpa plant.

### **Murray Basin**

- The WIM 150 deposit is a large, fine-grained heavy mineral deposit located near Horsham, Victoria, on the southern edge of the Murray Basin. Previous drilling by CRA indicates the deposit contains at least 10 million tonnes of ilmenite, six million tonnes of "Hi-Ti" minerals (rutile and leucoxene) and four million tonnes of zircon.
- The WIM 150 deposit and environs was acquired from the Victorian Government through a competitive tender for an exploration licence. Austpac's proposed program, as set out in the tender, includes bulk sampling, pilot plant testing and market evaluation of the products. EL 4521 was granted in December 2000.
- Austpac has now completed its initial bulk sampling of the heavy mineral horizon at WIM 150 and has stockpiled over 400 tonnes of ore for upgrading as required. A heavy mineral concentrate will be produced from the bulk sample for processing at the Company's pilot plant at Newcastle.
- The heavy mineral suite in the WIM 150 deposit is fine-grained and requires treatment to produce readily saleable products. Bench scale work undertaken last year by Austpac produced an acceptably sized synthetic rutile from a fine-grained ilmenite from another deposit. With its well-developed pilot plant facilities at Newcastle and experienced team, Austpac is in an excellent position to develop appropriate treatments for WIM 150 heavy minerals.
- Provided the pilot plant work demonstrates that upgrading of the fine-grained minerals is technically and economically viable, WIM 150 could form the base for a major new synthetic rutile production facility in Victoria.
- Coarser grained, strand line, heavy mineral deposits are well known throughout the Murray Basin. Ilmenite concentrates from the strand line deposits contain high levels of chromite, which must be reduced to produce a premium ilmenite. Austpac has demonstrated that the ERMS process can reduce chromite to acceptable levels, and the process has been evaluated by a number of groups active in the Basin.
- A major test work program is planned at Newcastle using a bulk sample provided by one group from one of its deposits in the Murray Basin. This test work will form part of a feasibility study for the use of the ERMS process to produce a premium ilmenite from a chromite-contaminated concentrate. The work is scheduled for completion by the middle of this year. Discussions are also well advanced with this group for a technology licence.

For further information please contact:

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