



# AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

14<sup>th</sup> April 2011

## NutriMix AND SOIL SUBSTITUTE TECHNOLOGY

Over the last 12 months, **Soil Sub Technologies Limited** ("SOI" or the "Company") has performed a thorough assessment of the Nutrimix product which included a comprehensive review of information left by previous SOI management and further trialling of Nutrimix in its current form.

The conclusion reached by the Company is that it would be uneconomic to continue the development of Nutrimix with its current formulation due to issues associated with access to raw materials and resultant costs. However, the Company's primary and continuing focus remains the development of a marketable soil substitute product.

As a result of this analysis and on advice from the Company's consultants, whom had previously worked on the Nutrimix product prior to the Company's administration, the Board is pleased to announce that it has decided to invest in the development of an alternative and potentially superior soil substitute product under the Nutrimix brand over the next six (6) months. Distinct advantages may include cheaper and more consistent access to raw materials along with more defined control over the trailing process.

The basis for the envisaged improvement in the Nutrimix produce has been the identification of new base materials which may lead to practical application improvement and lower cost inputs.

The Patent PCT/AU99/00730 that underpins the Nutrimix brand encapsulates the use of various raw materials such as sugarcane mill mud, coco peat and sedge peat which may be used in smaller ratios and complemented with newly discovered raw materials such as sugarcane waste, various other sources of peat, cotton waste and animal based sourced material found in industries such as equine and poultry.

The Company will continue to operate within the parameters of Patent PCT/AU99/00730 albeit with a slightly different composition of raw materials which is allowed for under the Patent, and for this trialling will be initiated from the beginning to end to ensure that the end formulation is repeatable under a range of conditions and is able to be duplicated multiple times.

The Company will be focussing on the development of a soil supplement product and trialling will focus on these factors:

- Nutrient profile – preferred levels of N:P:K and other micro/macro nutrients
- Organic matter levels – required regeneration levels
- Bulk density – effects transportability and associated costs
- Porosity – water retention properties

Trialling will require the procurement of certain raw materials to make up the composition of the product and will be performed by a well-credentialed agronomist and third party testing facility. These raw materials will now be easily attainable and can be found in common industries such as the equine industry, rice industry, canneries and cotton farms. Each raw material will undergo testing to determine their suitability for use and consideration will also be given to quantities/reliability of supply available. Some other considerations include storage costs and environmental issues.

Once the waste material analysis has been received, the results will be compared to the criteria created earlier and either rejected or held for further work. Waste material which show excellent nutrient profiles will then be processed to meet the desired texture and particle size required for the finished product. This processing may include composting, dehydration, crushing and grinding.

Manual processes will also indicate the level of complication required in a full scale manufacturing process. Raw material waste products may be rejected if it results in a processing that is too extensive and the blending will again be done manually.

On the conclusion of the initial six month phase to trial the raw materials and should these trials provide positive outcomes, the Company may perform a feasibility study into the development of a cost effective manufacturing process and procedure that will take into account the following factors:

- Plant and equipment required
- Ideal site size and location
- Labour requirements
- Site set up costs
- Estimated running costs
- Amortization of plant
- Transport Costs
- Packaging costs

The Company is excited to pursue this new direction in the soil substitute industry and looks forward to updating its shareholders in the coming months.

# OPTION TO ACQUIRE WEST TIMOR MANGANESE PROJECT

On 11<sup>th</sup> April 2011, the Company executed an option (expiring 11<sup>th</sup> August 2011) to acquire a 70% interest in the 'Tasinifu' Manganese Project ("the Project") from Indonesian company PT Winspec ("Winspec" or "the Vendor").

A summary of the Project is as follows:

- The Project is located in West Timor in the Indonesian province of Nusa Tenggara Timur (NTT), a region well known globally as a source of high-grade (+42% Mn) manganese ore.
- Preliminary surface sampling by Winspec and more recently Perth based geological consultants Ravex Pty Ltd ("**Ravex**") returned several high-grade rock chip samples up to 56% Mn (Table 1). This work indicated near surface manganese occurrences, together with extensive river float and ridge slope occurrences of massive boulder and outcrop manganese material, extends over distances exceeding 2 kilometres along strike and up to 100 metres in width.
- Geologists have been deployed by **Ravex** to undertake further surface sampling and mapping that aims to evaluate the deposits by trenching and pitting, and, subject to results, follow-up reverse circulation and diamond drilling.
- The acquisition will be subject to, *inter alia*, satisfactory legal and technical due diligence to the absolute satisfaction of **Soil Sub Technologies** together with the satisfaction of all ASX Listing Rules.

## TASINIFU MANGANESE PROJECT

### 1.0 INTRODUCTION

The Directors of the Company are pleased to announce that the Company has executed an Option Agreement ("Option") with PT Winspec ("Winspec"), giving the Company the right to acquire 70% interest of the Tasinifu Manganese Project (Schedule A). The Company has 4 months to exercise the Option during which time the Company will perform further legal and technical due diligence which may include surface sampling, trenching, mapping and upon choosing to exercise the Option, a view to identifying drill targets for a program later in the year.

### 2.0 TENEMENT DETAILS

The Project comprises an *Izin Usaha Pertambangan* ("IUP") covering a total of 1890ha (Figure 1, 2) granted to PT Winspec Indonusa, which is currently held 100% by PT Winspec. The IUP is located in Desa Tasinifu, Kecamatan Miomafo Barat, Kabupaten Timor Tengah Utara (Kefa district), Nusa Tenggara Timur (NTT), and is prospective for manganese and related minerals.

The Kefa district has long been a producer of manganese ore supplied by local artisanal groups operating numerous small surface and shallow pit mines.



FIGURE 1: Location of Tasifinu Manganese Project, West Timor, Indonesia (source: Ravex, March 2011).

### 3.0 GEOLOGICAL SETTING

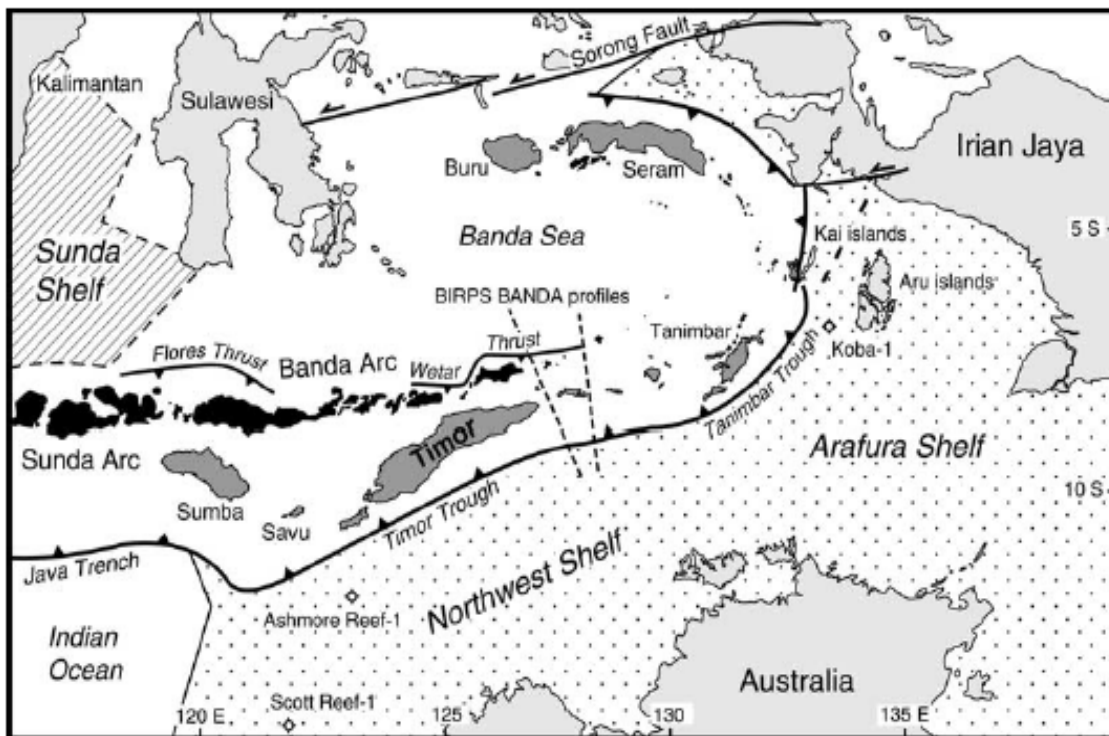


FIGURE 2: Location of Timor Island relative to Australia and the Banda Arc. Volcanic islands are shaded in black, forearc islands are intermediate grey. The offshore Australian and Sundaland continental shelves are represented by the dotted and hatched patterns, respectively. (source: T.R. Charlton/Journal of Asian Earth Sciences 20 / Yr-2002, p-852).

In the Kefa district, manganese commonly occurs as thin high grade layers generally less than 5 cm thick and also in thin layers containing very high grade manganese nodules (often grading near to 60% Mn), within claystone-to-shale bedded rock, which forms a substantial part of the widespread geological sequence called the **Bobonaro Complex**. Although the Bobonaro manganese occurrences

are now the chief source of production coming out of Timor, it is currently estimated that the total annual production from the province is of the order of 100,000tpa Mn-ore.

| Sample ID  | Prosp | UTM_E  | UTM_N   | Sample Description                             | Mn %  | Fe %  | SiO2 % |
|------------|-------|--------|---------|--|-------|-------|--------|
| OM01       | Kanis | 633379 | 8957479 | High grade manganese boulder cluster           | 23.3% | 21.0% | 55.4%  |
| Om02       | Pos   | 636787 | 8958338 | Multi float high grade massive rock fragments  | 56.4% | 32.0% | 5.9%   |
| Boulder    | Zaka  | 634774 | 8960359 | Multi chips from exposed boulders and workings | 27.5% |       |        |
| Nodule Mn  | Zaka  | 634798 | 8960313 | Multi chips from exposed boulders and workings | 54.6% |       |        |
| Boulder Mn | Kanis | 633243 | 8957554 | Multi chips from exposed boulders and workings | 33.2% |       |        |
| POS        | Pos   | 639011 | 8959227 | Multi chips from exposed boulders and workings | 40.7% |       |        |

**TABLE 1:** Tasinfu, reconnaissance rock chip assay results.

During a reconnaissance field trip in March 2011, **Ravex** consultant geologists took a number of rock chip samples (Table 1) which returned high-grade Mn values with low impurities. They also observed that manganese in the region occurs in two main forms:

- As massive manganite mineral (Figure 3), together with minor psilomelane and pyrolusite, in replacement bodies, veins, and disseminations often near the contacts between shale and limestone rocks.
- As manganiferous shales (estimate 5-55% Mn), which also includes nodular manganese horizons (NB: These shales are marine shales that have been uplifted from the deep abyssal sea floor to their present location by plate tectonic processes).



During this field trip, **Ravex** observed near surface manganese occurrences, together with extensive river float and ridge slope occurrences of massive boulder and outcrop manganese material extending over distances exceeding 2 kilometres along strike and up to 100 metres in width.

**FIGURE 3:** Massive, boulders of manganese replacing a medium grained granular weathered clayey rock (iron-oxide clay as seen at base of photo).

## 4.0 LOGISTICS AND INFRASTRUCTURE

With good infrastructure already in place in West Timor (roads, ports, transportation, abundant labour, communication, food and accommodation) early exploration programs have low establishment costs with the ability to progress more rapidly than would be the case in remote areas of Australia such as the Pilbara. The mid-point of the tenements is situated approximately 45 kilometres direct or 80 kilometres by road from Wini port and 116 kilometres direct or 160 kilometres by road from Kupang port

(capital city of West Timor province), with both ports currently already exporting high grade manganese ore sourced from other local mining operations.

The port at Oecussi town (the capital of the Oecussi enclave of East Timor) is located on the coast just 25 kilometres directly north from the tenement area. Wini port, located on the NE coast of West Timor, is planned to be expanded during the current year from the current 5,000 tonne freighter capacity with 18m draught depth, to 45,000 tonne capacity with in excess of 50m draught depth.

## 5.0 FUTURE EXPLORATION

During the four month option period, **Soil Sub Technologies** intends to undertake an active reconnaissance exploration program focussing on rock chip sampling, mapping and subject to results, bulk sampling and metallurgical testing. If **Soil Sub Technologies** chooses to exercise the Option, the Company intends to identify drill targets for the latter half of CY 2011.

## 6.0 CHANGE OF COMPANY ACTIVITIES

The exercise of the Option is likely to constitute a change of activities of the Company in which case the ASX will require SOI to re-comply with Chapter 1 and Chapter 2 of the ASX Listing Rules. This would require, *inter alia*;

- The Company registering a Prospectus with ASIC and completing a capital raising through the issue of shares at a minimum issue price of 20 cents each.
- The Company applying for re-quotations of its securities to the official list of ASX;
- The Company having at least 400 shareholders holding a marketable parcel of at least A\$2,000 shares each;
- The Company having a Net Tangible Asset backing of at least A\$2.0 million; and
- The Company holding cash reserves after expenses of at least A\$1.50 million.

There is no guarantee that the Company will exercise the Option. Please direct any enquiries to the Company on (08) 9321 3277.

Yours Sincerely,



Guy T. Le Page, MAusIMM, FFIN

### Chairman

#### Professional Statement

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Rudy Vooys, a Member of The Australasian Institute of Mining and Metallurgy. Mr Vooys is a Director of Ravex Pty Ltd which provides Exploration Management services to Soil Sub Technologies Limited. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Vooys consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# Schedule A

## 1.0 OPTION AGREEMENT

### 1.1 Summary

PT Winspec has granted **Soil Sub Technologies** an exclusive option (“the Option”) to acquire a 70% interest in the Tasinifu Manganese Project in consideration for an Option fee of Rp500,000,000 (US\$56,000). The Option terminates on 11 August 2011.

PT Winspec and PT Renaissance Sinergi Optima (“the Consultant”) will receive a respective 25% and 5% free carry position through production following the exercise of the Option. The exercise of the Option will be conditional on due diligence to examine key areas such as;

- Validity of title;
- Inspection and reconnaissance exploration of various manganese occurrences and exposures on the project area;
- Examination of various logistical issues such as quality and access to roads, port access, port capacity and other potential infrastructure requirements;
- Examination of current artisanal manganese mining activity; and
- Review of other mineral potential on the tenement areas.

### 1.2 Commercial Terms

An Option fee of Rp500,000,000 (US\$56,000) has been paid to PT Winspec.

In the event that **Soil Sub Technologies** exercises the Option, it will need to re-comply with the new listing requirements in Chapters 1 and 2 of the ASX Listing Rules. This will involve obtaining shareholder approval, preparing a full form prospectus and completing a capital raising through the issue of shares at a minimum issue price of 20 cents each.

**Soil Sub Technologies** stresses that no decision has been made to exercise the Option as at the date of this announcement. A decision will only be made after **Soil Sub Technologies** has completed further legal and technical due diligence on the Tasinifu Manganese Project.

On exercising the Option subject *inter alia* to shareholder approval at a General Meeting of the Company and satisfaction of relevant ASX and ASIC laws and regulations, **Soil Sub Technologies** will be required to issue PT Winspec (or nominee) and PT Renaissance Sinergi Optima (from whom **Soil Sub Technologies** took an effective assignment of the Option Agreement) the following, on a post Chapters 1 and 2 basis (20 cents):

- i. A payment of Rp4,000,000,000 (US\$461,000) on exercise of the Option; and
- ii. Issue 14 million fully paid ordinary shares (“Shares”) in **Soil Sub Technologies** and 3.0 million options to acquire Shares at \$0.20 each expiring 31 December 2014 (“Options”);and
- iii. Issue 6 million **Soil Sub Technologies** Shares if and when the Project has returned a Net Profit After Tax (“NPAT”) of US\$6.0 million or the outlining of a JORC Inferred Resource of at least 500,000 tonnes of Manganese ore (whichever the earlier). In addition, a total of 0.5m Options will be issued with this first milestone; and
- iv. Issue 6 million **Soil Sub Technologies** Shares if an when the Project has returned a cumulative NPAT of US\$12.0 million or the outlining of a JORC Inferred Resource of at least 1,000,000 tonnes of Manganese ore (whichever the earlier). In addition, a total of 0.5m Options will be issued with this second milestone; and
- v. Issue 6.0 million **Soil Sub Technologies** Shares if and when the Project has delivered 12 months of continuous production of at least 3,000 tonnes per month or the outlining of a JORC Inferred Resource of at least 1,500,000 tonnes of Manganese ore (whichever the earlier). In addition, a total of 0.5m Options will be issued with this third milestone; and
- vi. Each of the milestones outlined in iii, iv and v above must be satisfied within 5 years of Soil Sub Technologies exercising the Option. Further, the securities to be issued on satisfaction of the milestones are stated post any consolidation that Soil Sub Technologies must undertake if it is required to re-comply with Chapters 1 and 2 of the ASX Listing Rules.
- vii. On exercise of the Option, PT Winspec may nominate a Director for one non-executive board position, providing their nominee is a suitably qualified and experienced candidate.

In addition, the Company has provided a facility of US\$200,000 to PT Renaissance Sinergi Optima to be used towards expenses incurred in Indonesia during due diligence on behalf of **Soil Sub Technologies**. PT Renaissance Sinergi Optima is required to seek prior written authorisation for funds drawn down on this facility.