

# Mindoro Provides an Update on the TVI Joint Venture Projects

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MELBOURNE, AUSTRALIA -- (Marketwire) -- 02/13/13 -- [Mindoro Resources Ltd.](#) (TSX VENTURE: MIO) (ASX: MDO) (FRANKFURT:WKN 906167) ("Mindoro") is pleased to provide an update on the joint venture projects with TVI Pacific Inc. (TSX: TVI) (OTCQX: TVIPF) ("TVI"), and its Philippines operating subsidiary TVIRD. Mindoro and TVI have signed four joint venture agreements, previously announced on July 6, Sept. 7 and Sept. 27, 2012, relating to the Agata and Pan de Azucar mining projects located in the Philippines on the Islands of Mindanao and Panay, respectively. The joint ventures present TVI and Mindoro with multiple growth opportunities for near-term and medium-term cash flow generating potential. Under the agreements TVIRD may earn up to a 60% interest and will act as operator of the projects. A management committee composed of senior management members of both TVIRD and Mindoro will oversee each of the projects.

- Growth opportunities include:

- near-term high iron (Fe) laterite direct shipping ore (DSO) operation
- near-term limestone DSO operation
- medium-term pyrite material DSO operation
- medium-term lime production facility
- medium-term nickel (Ni) processing plant

- Development planning/permits are well-advanced for the high iron and limestone DSO operations, both with potential to generate near-term cash flow.

- Project Execution/Technology Development team fast-tracking Ni processing plant using low-capex leaching technology.

- Ni processing plant capex is expected to be less than US\$100 million; estimated opex approximately US\$4 per lb Ni, assuming use of imported sulphuric acid.

- Pan de Azucar pyrite deposit being evaluated for both DSO of pyrite material and production of sulphuric acid for the Agata Ni processing plant to further reduce opex.

Mindoro currently holds a 75% interest in the Agata and Pan de Azucar projects and has the option to acquire an additional 25% in the Agata Project from its partner Minimax Mineral Exploration Corporation. If all options are exercised, TVI will have a 60% interest in the Agata Project and Mindoro 40%. Mindoro will be carried to production for the DSO stage, and through feasibility study for the processing stage.

Tony Climie, PGeol., and CEO of Mindoro, comments, "We are delighted with the rapid progress being made by the operator TVI, the exciting development opportunities unfolding, and the potential for early cash flow. After many years of assembling and advancing our Philippine project portfolio it is especially gratifying to see these approaching fruition".

In a TVI news release on the joint venture progress, Mr Clifford M. James, Chairman and CEO of TVI stated, "These projects comprise a pipeline of potentially long-life assets, capable of substantial, growing and continuous cash flow generation, which are expected to propel the company into a strong mid-sized, diversified miner. These are exciting opportunities and represent a major step forward for TVI."

TVIRD, as the operator of the projects, brings to the table a proven management team capable of project execution (the Project Execution/Technology Development team), on time and on budget. The Project Execution/Technology Development team for the Mindoro joint venture projects is composed of highly skilled technical experts who are familiar with the assets and the type of processing plant technology expected to be used.

Prior extensive pre-feasibility and engineering works have been conducted on the Mindoro properties. These reports can be accessed on Mindoro's website at [www.mindoro.com](http://www.mindoro.com) or under Mindoro's profile on SEDAR at [ww.sedar.com](http://ww.sedar.com).

Map 1: Philippines: Agata (Island of Mindanao) and Pan de Azucar Mining (Island of Panay) Project

## Locations

[http://media3.marketwire.com/docs/213MIO\\_MAP1.jpg](http://media3.marketwire.com/docs/213MIO_MAP1.jpg)

## AGATA MINING PROJECT

### Map 2: Agata Mining Project - Site Layout

[http://media3.marketwire.com/docs/213MIO\\_MAP2.jpg](http://media3.marketwire.com/docs/213MIO_MAP2.jpg)

The Agata mining project, located on the Island of Mindanao, includes the following opportunities:

- a near-term high iron laterite DSO operation
- a near-term limestone DSO operation
- a medium-term lime production facility
- a medium-term nickel processing plant project

Historical estimates of mineral resources and mineral reserves at Agata are set out in the technical report entitled "Technical Report for the Agata Nickel Laterite Project, Mindanao, Philippines" dated 20 December 2011 prepared by Ausenco for Mindoro (the "Agata Report"). Key assumptions, parameters and methods used to prepare the historical estimates are set out in the Agata Report, which uses the categories required by NI 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101").

The historical drilling by Mindoro referenced in the Agata Report was 682 drill holes for 12,252 metres in the main Agata North resource and 199 holes for 2,605 metres in Agata South resource.

### High Iron and Limestone DSO Operations/Lime Production Facility

Both the high iron DSO and the limestone DSO operations are near-term opportunities that have the potential to generate strong cash flows beginning in late 2013 (contingent on, among other things, receipt of permits in a timely manner). The high iron laterite and limestone deposits occur up to 1 kilometre from the coast, which is expected to positively impact transportation costs due to the close proximity of the mine pit to the port.

The upper portions of the laterite profile comprise the ferruginous zone and limonite zone, both rich in iron. It is estimated that there are approximately 7 million wet metric tonnes (wmt) of high iron material with iron grades ranging between 45% and 52%. These historical estimates are set out in the Agata Report referred to above. The deposit is expected to be developed as a surface mining operation with the high iron material most probably sold to the Chinese iron ore market.

Beneath the ferruginous and limonite zone is the higher nickel grade saprolite zone, which will be the dominant feed for a new nickel processing facility currently under consideration by the Project Execution/Technology Development team. The high iron DSO operation would be expected to generate early cash flow until the nickel processing plant is built and becomes operational, but shipments are expected to continue after this until the high iron material is exhausted. The high iron DSO operation already has an existing Environmental Compliance Certificate (ECC); however, other permits such as a port permit and a Declaration of Mining Feasibility are also required.

The limestone occurring at the coast is a massive recrystallized limestone of very high purity levels with calcium carbonate (CaCO<sub>3</sub>) of greater than 95% according to the Agata Report. Five (5) holes were drilled into the limestone horizon by Mindoro but the number of holes drilled is not considered sufficient to classify a mineral resource.

The limestone is estimated in the Agata Report to be up to 50 metres thick. The potential quantity and grade is conceptual in nature, because there has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the target being delineated as a mineral resource. The initial plan is to develop a resource, and mine and ship limestone DSO utilizing the infrastructure developed initially for the high iron DSO operation. Currently no permits are in place for mining the limestone.

Since the quality of limestone quarried at Agata is expected to be high, the Project Execution/Technology Development team also plans to construct a lime production facility at the Agata project site. The lime produced would be used in the nickel processing plant, offsetting the costs of imported lime while also creating potential for some to be sold. The lime processing facility is a medium-term project currently expected to come online at the beginning of 2015 pending the receipt of all required permits, among other

things.

**The development plans and initial pre-development activities for the two DSO operations are underway and include:**

a) For the high iron DSO operation:

- the preparation of compliance reports to regulators
- land acquisition for the port facilities and roads
- planning and design for port construction
- road/infrastructure design and construction plans
- initial pre-development activities, including initial road construction and camp development
- confirming markets for products
- mine development planning
- community relations

b) For the Limestone DSO operation:

- further drilling on the limestone deposits to delineate resource to NI 43-101 standards
- preliminary concepts and mining plans for the limestone
- confirming markets for limestone and lime products
- metallurgical test works

An update to the NI 43-101 report prepared originally for Mindoro, together with a scoping study on both the high iron and Limestone operations are also initially planned and are to be followed by feasibility studies.

### **Agata Nickel (Ni) Processing Plant**

The Agata Ni processing plant is a medium-term growth opportunity, which TVI expects could come into production in mid-2015, dependent on such things as a successful metallurgical testing program and pending receipt of the required permits. The plant would initially be designed to have a 20-year life, and would be built in modules with the ability to add capacity over time by adding further modules to increase throughput and Ni production. The Project Execution/ Technology Development team is proposing the use of innovative, low cost leaching and downstream Ni recovery and purification technology rather than the traditional high cost HPAL processes used in the laterite nickel industry. TVIRD's team of technical staff engaged to deal with the Mindoro joint venture projects have substantial expertise in this leaching and downstream Ni recovery and purification technology and their expertise will be used to fast-track the processing plant.

The laterite feed to the processing plant comprising limonite material and saprolite material would be mixed with sulphuric acid and undergo numerous steps to ultimately produce a nickel hydroxide product. This intermediate nickel product could either be sold as is or further processed to produce metallic nickel. The estimated capital cost for the nickel processing plant plus associated infrastructure (port, water, power, etc.) is expected to be less than US\$100 million. The cash operating costs are estimated to be approximately US\$4 per lb Ni (approximately US\$9,000/t Ni), assuming the use of imported sulphuric acid. If the Pan de Azucar pyrite project can be successfully commercialized (refer below), then the opportunity exists to self-produce sulphuric acid at the nickel plant site, thereby further reducing operating costs, and with the added benefits of by-product electricity and steam.

Site infrastructure is excellent with local sources of labour, fresh water and power (supplemented by back-up generators). The processing plant will be located within two kilometres of the port, thereby simplifying acid transport and other logistics, as well as keeping operating costs down. Deep water for ships up to 50,000 tonne capacity occurs within 250 metres of the coastline.

A number of activities relating to the Agata Ni Processing Plant are underway and include:

- internal project feasibility scoping including previous relevant Mindoro scoping work
- external laboratory testing at BGRIMM of a representative bulk ore sample taken from the Agata Ni deposit, including:
  - crushing and grinding tests
  - pre-leach thickener settling tests
  - primary and secondary leaching tests
  - leach residue preliminary settling and filtration tests
- establishment of laboratory and pilot testing facility (in the Philippines)
  - bench-scale laboratory equipment has been installed and testwork will commence at this facility before mid-February 2013
  - pilot plant equipment has been identified and specified
- the process flowsheet has been identified and confirmed by laboratory tests
- process flow diagrams are near completion
- mass and energy balance have been developed in METSIM, using laboratory test data to calibrate the model
- environmental and leached ore storage facilities designs are well advanced
- preliminary infrastructure design is underway, including:
  - port/jetty design, including reagent storage facilities
  - water source identification
  - road design
  - process plant location and preliminary layout

An update to the NI 43-101 report prepared originally for Mindoro, together with a scoping study, are initially planned, to be followed by delivery of a full feasibility study. The feasibility study is underway and expected to be completed by the end of 2013. Pending a positive feasibility study and a decision to proceed, plant construction is expected to commence in 2014 with the commissioning/commercial production of nickel hydroxide product in Q2 of 2015, dependent on obtaining permits in a timely manner, among other things.

### **Pan de Azucar Pyrite Project**

As described in Mindoro's news release of February 8, 2012, the Pan de Azucar pyrite project located on the Island of Panay is a drill-defined exploration target, which comprises a pyrite-rich mineralized horizon of between 10 and 40 metres in thickness and dipping at a shallow 10 to 15 degrees. The mineralized horizon is exposed at the surface. Mindoro reported it has drilled 30 holes into the mineralized horizon, showing a potential quantity of 8 million to 12.7 million dry metric tonnes with a grade range of 35% to 40% sulphur (70% to 90% pyrite). The potential quantity and grade has been determined by averaging the intercepts from the drill assays. The potential quantity and grade is conceptual in nature, because there has been insufficient exploration to define a mineral resource (including number of holes drilled) and it is uncertain if further exploration will result in the target being delineated as a mineral resource.

TVI expects that commercializing the project may involve both the DSO export of pyrite material to China for the production of sulphuric acid and/or the self-production of sulphuric acid at the Agata Ni processing plant site. Currently there are no permits in place for the mining of the pyrite material.

Activities planned or underway for the Pan de Azucar Pyrite Project include:

- laboratory testing of the pyrite samples as a suitable feed for a sulphuric acid plant
- additional diamond drilling to delineate resource to NI 43-101 standards
- preliminary concepts and mining plans
- confirming markets for products
- metallurgical test works
- community relations

On behalf of the Board of Directors,

Tony Climie  
CEO

### **About Mindoro**

[Mindoro](#) is a Tier 1 Issuer trading on the TSX Venture Exchange (MIO), Australian Securities Exchange (MDO) and Frankfurt Stock Exchange (WKN 906167). Mindoro has a 75% interest, and an option to acquire the remaining 25%, in the Agata Nickel Project, Mindanao, and the Pan de Azucar Sulphur-Copper-Gold Project, Iloilo. TVI Pacific Inc. has the option to earn up to a 60% interest in these projects by meeting the earn-in requirements outlined in the September 27, 2012 release. Mindoro also holds a 53.3% stake in ASX listed [Red Mountain Mining](#) (ASX: RMX), which has a 100% direct and indirect interest in the Batangas gold and copper-gold projects.

Tony Climie is the CEO of Mindoro Resources Ltd and has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a qualified person as defined by National Instrument 43-101. Tony Climie consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

*This release may contain forward-looking statements including management's assessments of future plans and operations, and expectations of future production. These statements are based on current expectations that involve a number of risks and uncertainties, which could cause actual results to differ materially from those anticipated. These risks include, but are not limited to, the risks associated with the mining and exploration industry (e.g. operational risks in development, exploration and production; delays or changes in plans with respect to exploration or development projects or capital expenditures; the uncertainty of reserve estimates; the uncertainty with respect to results of exploration, the uncertainty of estimates and projections relating to production and the uncertainty of the availability of capital). The assumptions used in the preparation of such statements, although considered reasonable at the time of preparation, may prove to be imprecise and, as such, undue reliance should not be placed on forward-looking statements. The Company does not undertake to update forward-looking statements except where required to do so by law.*

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