



# MINDORO

RESOURCES LTD

## AGATA NICKEL SCOPING STUDY INDICATES LOW COST PROJECT POTENTIAL

EDMONTON, ALBERTA, October 6, 2010 - Mindoro Resources Ltd. (TSXV: MIO; Frankfurt: WKN 906167) today announced the release of the Agata Nickel Project Scoping Study. The results of the study indicate potential to establish a low operating cost nickel operation based on established acid leaching technology.

The study was initiated based on recommendations contained in the Development Options study, released on March 15, 2010, completed by Boyd Willis Hydromet Consulting (BWHC), which recommended a two-stage development plan. Stage One would involve extracting parcels of high-grade material for an initial Direct Shipping Ore (DSO) operation. In Stage Two, BWHC recommended the company establish a hydrometallurgical processing plant to treat the Run Of Mine (ROM) limonite and saprolite ore.

The objective of the Scoping Study is to provide a preliminary assessment of the economics of three identified processing options at  $\pm 30 - 35\%$  accuracy and identify the other project drivers such as environmental and technology risks. The scoping study includes the investigation of the mining, processing, process services, power generation, infrastructure, and major environmental issues. The study was based on the current Agata mineral resource estimate, including inferred resources. The study did not address certain economic parameters, such as Net Present Values or Internal Rates of Return which will be evaluated in a more advanced economic assessment that includes the DSO stage of the project, currently underway.

The preliminary characterisation of the ore types and their amenability to acid leaching, as described in the Development Study identified the following suitable processing routes, which are evaluated in this study:

- **Base Case** – a major integrated High Pressure Acid Leaching (HPAL) / Atmospheric Leaching (AL) / Saprolite Neutralisation (SN) process based in scale on the highly successful Sumitomo/Nickel Asia Coral Bay Nickel project, on Palawan Island, the Philippines. In this case 27,400 tonnes per annum of nickel as Ni-cathode product would be produced. The estimated average cash-cost of production (after year three) for this case is US\$2.47 per pound of nickel or US\$1.59 per pound of nickel with cobalt credit (assuming cobalt price of US\$18/lb and 80% payable for cobalt contained in cobalt sulphide). The Capital Cost estimate for this processing option, including electrowinning and acid production plant, is US\$1.33Bn. This includes a direct cost of US\$837 million, indirect infrastructure costs of US\$182 million and a 30% contingency.
- **Larger Production Case** - a scale-up of the base case which employs the maximum HPAL autoclave available. The nickel production for this option is increased to 42,000 tonnes per annum nickel as Ni-cathode. The estimated average cash-cost of production (after year three) for this case is US\$2.22 per pound of nickel or US\$1.35 per pound of nickel with cobalt credit (assuming cobalt price of US\$18/lb and 80% payable for cobalt contained in cobalt sulphide). The Capital Cost estimate for this processing option, including electrowinning and acid production plant, is US\$1.74Bn. This includes a direct cost of US\$1.1 Bn, indirect infrastructure costs of US\$243 million and a 30% contingency.
- **Atmospheric Leach Case** – This case involves Atmospheric Leaching of Saprolite only, without the use of autoclaves. The nickel will be recovered by hydroxide precipitation producing an intermediate Mixed Hydroxide Precipitate (MHP) product. The design capacity for this option is 14,300 tonnes per annum nickel contained in MHP. The estimated average cash-cost of production for this case (after year three) is US\$3.25 per pound of nickel or US\$2.94 per pound of nickel with cobalt credit (assuming cobalt price of US\$18/lb and 80% payable for cobalt contained in cobalt sulphide). The Capital Cost estimate for this processing option, including acid production plant, is US\$740 million. This includes a direct cost of US\$479 million, indirect infrastructure costs of US\$91 million and a 30% contingency.

Capital cost estimates did not include owner's costs, mining related capital costs, duties and taxes for equipment, technology fees/project support, EPCM assistance following introduction of feed to the plant, or an estimate of working capital. Operating cost estimates did not include sustaining capital costs, government charges, royalties, marketing costs, corporate consultancies or duties, customs or other imposts.

The Scoping study is based on the current Agata mineral resource estimate disclosed on September 8, 2010. For the purposes of the scoping study, relatively aggressive cut-off grades were applied to the resource to approximate plant-feed for the base case project sufficient for a production rate of >2.5 million tonnes treated per annum for six years. The Company is currently drilling the regional Exploration Target to further evaluate the potential of supplying sufficient total tonnes to the base case project for 20 years or more of similar production. The cut-off grades applied were Limonite: 0.85% Ni, Transition: 0.90% Ni and Saprolite: 1.0% Ni cut off. Additionally an upper cut-off of 1.35% Ni was applied to all three ore types to classify the high grade material for potential direct shipped ore operations, excluding 4.86 million additional tonnes of high-grade material. The estimated plant feed inventory derived from the current Agata resource, including the DSO component, is as follows:

	<b>M Tonnes</b>	<b>Nickel %</b>	<b>Cobalt %</b>	<b>Iron %</b>	<b>Al %</b>	<b>Mg %</b>	<b>SiO<sub>2</sub>%</b>
<b>Limonite</b>	7.51	1.05	0.112	43.7	2.85	2.12	8.59
<b>Saprolite</b>	8.88	1.15	0.024	10.8	0.46	16.9	40.5
<b>Sub-total</b>	16.39	1.10	0.065	25.9	1.56	10.1	25.9
<b>High Grade DSO</b>	4.86	1.59	0.044	16.0	0.73	14.4	35.8
<b>Total</b>	21.25	1.21	0.060	23.6	1.37	11.1	28.2

*As disclosed in the Company's January 11, 2010, press release, the potential quantity and grade of the Exploration Target is conceptual in nature; 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, and there is no guarantee that these resources, if delineated, will be economic or sufficient to support a commercial mining operation.*

*The preliminary assessment is preliminary in nature, it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary assessment will be realized.*

Previous metallurgical testing on the Agata mineral resource was completed by Enlin Steel Corporation (Enlin) in 2008. Enlin is a major stainless steel producer in the Asian region. The bench scale testwork program was conducted on 6 samples and included atmospheric leaching and HPAL. This work was reviewed by BWHC. Limonite HPAL gave results of >95% recovery for both nickel and cobalt with average acid consumption of 314 kg/t. Saprolite atmospheric leach gave results of 90% nickel recovery with 900kg/t acid.

While the Enlin testing was performed in a private, non-accredited lab and the equipment and procedures employed for HPAL testing were not disclosed to the Company, the results are considered comparable to other Philippines laterite test results and thus provide some confidence in the methods applied. Readers are cautioned that the sample size was limited and may not be representative of the deposit. For the purposes of the scoping study, BWHC applied more conservative assumed recoveries for each of the identified processes based on projects of similar size and scope in the Philippines and elsewhere. A more comprehensive bench scale testing program by SGS Lakefield Oretest, a NATA accredited laboratory in Perth, is due to be finalised and reported in October 2010.

The study concludes that the potential to establish a low operating cost nickel operation is subject to satisfying certain key technical factors, including the conversion of the regional Exploration Target to sufficient mineral resources to support an economic project life. Currently identified resources will support a mine life of six years and are not considered sufficient to warrant commencement of production, based on the base case integrated High Pressure Acid Leaching (HPAL) / Atmospheric Leaching (AL) / Saprolite Neutralisation project processing 2.75 million tonnes per annum. However integrated processing options including DSO and the Atmospheric Leach case will be advanced to provide an economic assessment of the opportunity to develop an integrated and staged project based on the current Agata Resource.

The Agata Nickel Project Scoping Study was coordinated by Boyd Willis, MAusIMM, of Boyd Willis Hydromet Consulting (BWHC), an independent qualified person as defined by NI 43-101, in conjunction with Ausenco-Vector in Brisbane, Australia. Boyd Willis has verified and authorized the technical information detailed in this release. Boyd Willis has 29 years of experience as a professional process engineer including in technical positions at Kwinana Nickel Refinery in Western Australia and the QNI nickel laterite project in North Queensland, and experience on other nickel laterite projects around the world. The NI 43-101 compliant technical report will be filed on SEDAR within 45 days.

Mining will be carried out by industry standard open cut methods that are commonly applied in the Philippines and elsewhere. Mining will be relatively selective on two to three meter high benches and will involve a range of grade control and stockpiling strategies. Mining costs in this study have been assumed based on information from comparable local operations, adjusted for differences in haulage distance and scale of operation.

Preliminary capital infrastructure and open pit designs for a limited life Stage 1 DSO project are currently being finalized. Offtake discussions in progress indicate a market for nickel pig-iron feed, 0.9% to 1.1% nickel and >48% iron limonitic material, and Electric Arc Furnace (EAF) feed at >1.8 % nickel saprolitic material. There is also a developing market for thermally-upgraded, "Sintered" material. A thermal-upgrading scoping study is in progress through Hatch Engineering. Preliminary indications are that this represents a viable value-add to Stage 1 of the nickel project

*The company's production objectives are intended to provide an indication of management's current expectations and are still conceptual in nature. It is uncertain that it will be established that these resources will be converted into economically viable mining reserves. Until a feasibility study has been completed, there is no certainty that these objectives will be met.*

Tony Climie, P.Geol, is the company's Qualified Person as defined by National Instrument 43-101, who is responsible for monitoring the supervision and quality control of Mindoro's exploration programs and who has reviewed and verified the technical information contained in this news release.

## **ABOUT MINDORO**

Mindoro is a Tier 1 Issuer trading on the TSX Venture Exchange (MIO) and the Frankfurt Stock Exchange (WKN 906167). Mindoro is focused on exploration in the Philippines with a strategy of advancing early stage opportunities to production or joint venture. Mindoro controls major nickel laterite resources in the Surigao District, Mindanao, where potential for a value-added direct shipping ore (DSO) operation to generate early cash flow is being advanced as well as large scale potential for an onsite processing plant.

Mindoro has NI 43-101 Mineral Resource estimates on its Agata nickel-cobalt project totaling Measured and Indicated 32.6 million dry metric tonnes (DMT) at 1.04% Nickel and 0.05% Cobalt and Inferred 1.68 million DMT at 1.04% Nickel, 0.04% Cobalt. The Surigao regional Exploration Target is 50 million to 70 million DMT at 0.9% to 1.2% Nickel (See press releases dated January 11 and September 8, 2010). Drilling of the Surigao nickel laterite Exploration Target is in progress.

Mindoro also has NI 43-101 Mineral Resource estimates on both its Lobo and Archangel (Kay Tanda) gold-silver projects. Mindoro has identified 22 porphyry copper-gold prospects and has three projects in the Batangas area of southern Luzon which are the subject of a farm-in arrangement whereby Gold Fields Ltd may earn 75 percent interest through direct project expenditure.

Drilling on the American Tunnels project has confirmed potential for a near-surface, bulk-tonnage gold target and porphyry copper-gold targets. Other objectives include progressing joint venture discussions on Mindoro's porphyry copper-gold prospects at Surigao.

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