

ERDENE RESOURCE DEVELOPMENT CORP.

Erdene Provides First Quarter Project Updates and Financial Results

Annual General Meeting May 20, 2010

For Immediate Release

Halifax, Nova Scotia – May 17, 2010 – Erdene Resource Development Corp. ("Erdene" or "Company") (TSX:ERD) today provided an update on its principal projects in conjunction with the release of its first quarter 2010 financial results.

2010 First Quarter Highlights

- > Donkin Coking Coal Project Advances with Commencement of Surface Work
- Zuun Mod Molybdenum Project Optimization and Modelling Studies Underway
- > Preparations Underway for Regional Coal and Metal Exploration Programs in Mongolia
- New Operator to Make Granite Hill Aggregate Project one of its Top Priority New Developments
- > Advanced Primary Minerals Expanding Product Sales and Testing
- Current Cash Position of \$12.2M

Erdene will be holding its Annual General Meeting of Shareholders on Thursday, May 20 commencing at 5:30 pm. The meeting will be held at Purdy's Wharf Tower II, Suite 1300, 1969 Upper Water Street, Halifax, Nova Scotia. Peter Akerley, President and CEO, will be giving a presentation on the Company's current exploration and development activities following the formal proceedings of the meeting. All shareholders are encouraged to attend. A live webcast of the presentation will be available on the Company's website (www.erdene.com) during the AGM.

Project Updates and Summaries

Donkin Coal Project

During the first quarter, Xstrata Coal indicated that they intend to develop the Donkin Coal Project based on sales into the coking coal market. The project is expected to utilize four continuous miners added incrementally over the first three years of production and include an on-site coal wash plant and transport coal via a proposed barge-to-ship system. The project will require Federal Environmental Assessment approval. Under the Project Plan, the Donkin Coal Project is projected to produce approximately 2.75 million tonnes per annum of washed export grade coking coal at full production, assuming the receipt of all approvals.

Erdene has a 25% interest in the Donkin Coal Project, located on Cape Breton Island, Nova Scotia with joint-venture partner and project manager Xstrata Coal Canada ("Xstrata Coal"). The deposit is strategically located proximal to deep water with ready access to some of the world's major shipping routes. The resource includes 227 million metric tonnes ("Mt") of Indicated and 254Mt of Inferred high volatile-A bituminous (12,000-14,000 Btu), high sulphur, and medium ash coal. The processed Donkin coal also has many excellent coking coal properties including low ash, medium sulphur, low phosphorus, high CSN (crucible swell number) and fluidity.

On April 20, 2010, Erdene provided an update on the Donkin Coal Project announcing that a number of key elements of the project have been initiated, including civil construction, engineering and pre-feasibility studies, environmental assessment studies and consultation with government officials.

Site development commenced with the awarding of the access road construction contract. Municipal Ready Mix Ltd. (Sydney, Nova Scotia) is constructing the 2.5-kilometre long road, which is expected to be completed by mid-July 2010.

Xstrata Coal initiated studies by Sedgeman and GW Engineering/Kellogg Brown & Root Pty Ltd. to add a wash plant to the coal handling facility and to prepare prefeasibility level studies on the offshore transportation system. Mining consulting firm, Marston (Missouri), has been engaged to complete a pre-feasibility study. Xstrata Coal has also contracted Stantec Inc., a North America based global environmental and engineering firm, to lead the environmental permitting and regulatory compliance process.

Meetings have been held with both federal and provincial government departments to determine the most efficient and effective procedures to follow to secure all regulatory requirements and operating permits. The intention is to file all applications within the next 12 months.

In association with recent developments on the Donkin Coal Project, Xstrata Coal will be appointing a Nova Scotia-based Project Manager and an Environment/Community Liaison Officer. These individuals will lead the project team to advance the Donkin Coal Project into the next phase of development.

Zuun Mod Molybdenum Project

During the first quarter, the Company's independent technical consultants, Minarco-MineConsult of Australia, were contracted to conduct pit optimization and scheduling studies on the Zuun Mod deposit to combine with the previously completed work under a preliminary assessment level study initiated in 2008. Following completion of this work, it is anticipated that the information will be used to create a financial model on which to base decisions regarding the advancement of the project to the pre-feasibility stage. In addition, the Company has contracted Wave Geophysics of Evergreen, Colorado to provide a model and interpretation of all geological, geochemical and geophysical data from the Zuun Mod project with a focus on identifying additional exploration targets in the vicinity of the Zuun Mod molybdenum-copper deposit. Zuun Mod is a porphyry molybdenum-copper deposit containing 215 million pounds ("Mlbs") of molybdenum in the Measured and Indicated category, grading 0.054% Mo, and a further 208Mlbs in the Inferred category grading 0.051% Mo, making it one of the largest undeveloped molybdenum-copper deposits in the Asia region. The Company controls the Zuun Mod deposit through a single exploration license totaling 49,538 hectares, located in Bayankhongor Province in Mongolia, approximately 950 kilometers southwest of Ulaanbaatar and 215 kilometers from railhead on the Mongolia-China border at Ceke. The railhead is located 20 kilometers south of the Nariin Sukhait and Ovoot Tolgoi coal mines.

Coal and Metals Projects in Mongolia

Erdene has been at the forefront of Mongolia coal exploration in the past few years having evaluated every known coal occurrence in Mongolia and completed over 250 site evaluations. As a result of this process, the Company has now focused on certain prospective areas and potential acquisitions. A budget of USD\$1.9 million is in place for 2010 coal exploration programs in Mongolia, which is fully funded by Xstrata Coal Canada Ltd. through the Erdene-Xstrata Coal Alliance. Xstrata Coal Canada Ltd. has the right to earn a 75% interest in any of Erdene's coal projects in Mongolia by funding through to completion of feasibility.

In addition to coal exploration in Mongolia, the Company carried out a comprehensive regional exploration program for porphyry related copper-gold-molybdenum mineralization in south-western Mongolia. The program covered an area of 35,000 square kilometres in 2009 and included interpretation of Landsat data, a regional-scale stream sediment geochemical survey, geological prospecting and a rock-chip geochemical sampling program. This work has resulted in the identification of a number of new copper-gold-molybdenum porphyry targets.

Preparations for the upcoming field season in Mongolia continued throughout the first quarter principally related to coal and metals exploration on the more than 400,000 hectares of new exploration licenses acquired in recent months. In addition, the company continues to carry out due diligence work related to additional project evaluations.

Advanced Primary Minerals Corporation ("APM")

Erdene's controlled subsidiary, APM, experienced favourable market reaction within the domestic ceramics market to products produced from its' newly commissioned primary kaolin dry processing plant in Georgia. In 2009, APM completed construction of a processing and testing facility in Dearing, Georgia, to produce primary kaolin products for the U.S. market. The plant was officially opened in October 2009. The plant is employing a patent pending DHS (Differential Hardness Separation) dry process on clay mined from its Tudor primary kaolin deposit which was permitted for mining in April 2009. APM continues to build markets for its specialty primary kaolin products through sales growth within its current customer base and through ongoing product trials for a number of target customers. During the quarter, work began on the development and testing of an expanded line of wet processed products using its fully equipped laboratory and pilot plant facility. This study is expected to continue over the next 12 months.

Granite Hill Construction Material Project

During the first quarter, through the acquisition of Ready-Mix USA and Aggregates USA, the operation of the Granite Hill Project came under the control of SPO Partners ("SPO"), a private California based investment company. As a result of the acquisition, Aggregates USA (Sparta), LLC ("AUSA") is now party to the mining lease agreement with the Company in the place of Ready-Mix USA. AUSA has advised the Company that SPO is planning to make the Granite Hill Project one of its top priority new developments. The Granite Hill site clearing was recently expanded from an area of approximately 19 acres for the pit to approximately 43 acres to include the area for the plant, compound, and rail access areas. Site development is underway and projections are for mine development to begin by mid 2010 with production commencing late in 2011.

2010 First Quarter Financial Results Summary

Erdene's 2010 first quarter financial statements and Management's Discussion and Analysis were filed with regulatory authorities on May 14, 2010 and are available on the Company's website at <u>www.erdene.com</u> and on SEDAR at <u>www.sedar.com</u>. These statements are provided on a consolidated basis incorporating its controlled subsidiary, Advanced Primary Minerals Corp.

For the three months ended March 31, 2010, exploration and operating expenses amounted to \$568,915 compared to \$437,595 in the first quarter 2009. Including capitalized exploration costs and excluding write-offs, exploration expenses were \$792,700 for the first quarter of 2010 compared to \$843,018 in the first quarter of 2009.

Erdene's first quarter expenditures were directed toward the continued advancement of the Company's primary projects, namely the Donkin Coal Project, Zuun Mod Molybdenum Project, metal exploration in Mongolia and industrial mineral projects.

Administrative expenses totalled \$728,062 (including \$197,895 in non-cash stock based compensation) for the first quarter of 2010, compared to \$459,395 in the fourth quarter 2009.

The company recorded a net loss of \$857,978, or \$0.01 per share, in the first quarter of 2010 compared to net income of \$681,223, or \$0.01 per share, in the first quarter of 2009. The Company recognized an \$878,595 dilution gain on the disposal of a subsidiary in the first quarter of 2009.

At March 31, 2010, Erdene had approximately \$12.9 million of cash and cash equivalents on hand, on a consolidated basis, compared with approximately \$13.8 million at December 31, 2009.

Qualified Person

J.C. (Chris) Cowan, P.Eng. (Ontario), is a Qualified Person as that term is defined in National Instrument 43-101 and has reviewed and approved the technical information contained in this news release.

About Erdene

Erdene Resource Development Corp. is a diversified resource company with multiple projects at various stages of development from exploration to production, all focused on high-growth commodities. Erdene has a current working capital position of approximately \$12.2 million, including that of its controlled subsidiary APM, with 89,230,877 common shares issued and outstanding and a fully diluted position of 93,084,877 common shares.

Forward-Looking Statements

Certain information regarding Erdene contained herein may constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements may include estimates, plans, expectations, opinions, forecasts, projections, guidance or other statements that are not statements of fact. Although Erdene believes that the expectations reflected in such forward-looking statements are reasonable, it can give no assurance that such expectations will prove to have been correct. Erdene cautions that actual performance will be affected by a number of factors, most of which are beyond its control, and that future events and results may vary substantially from what Erdene currently foresees. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, exploitation and exploration results, continued availability of capital and financing and general economic, market or business conditions. Discussion of the various factors that may affect future results is contained in Erdene's Annual Information Form dated March 29, 2010, which is available at www.sedar.com. The forward-looking statements are expressly qualified in their entirety by this cautionary statement. The information contained herein is stated as of the current date and subject to change after that date and Erdene does not assume the obligation to revise or update these forward-looking statements after the date hereof AIF, or to revise them to reflect the occurrence of future unanticipated events, except as may be required under applicable securities laws.

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