



PRESS RELEASE

CZN-TSX
CZICF-OTCQB

FOR IMMEDIATE RELEASE
July 31, 2012

CANADIAN ZINC ANNOUNCES MERGER AND PRIVATE PLACEMENT WITH PARAGON MINERALS CORPORATION

Vancouver, British Columbia, July 31, 2012 – Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) (the “**Company**” or “**Canadian Zinc**”) is pleased to announce that it has entered into a binding arrangement agreement (the “**Agreement**”) to complete a business combination (the “**Merger**”) as well as a non-brokered private placement (the “**Private Placement**”) with Paragon Minerals Corporation (TSXV: PGR) (“**Paragon**”). The completion of the merger will create a premier base and precious metals exploration and development company with a portfolio of projects in established mining jurisdictions in Canada.

Paragon’s flagship project is its 100% interest in the South Tally Pond Property, which includes the Lemarchant deposit, and is located in a proven mining district near Buchans, Newfoundland. The South Tally Pond Property covers 261 km² and is immediately adjacent to Teck Resources Limited’s Duck Pond Cu-Zn mine and mill complex. The Lemarchant deposit is a significant precious metal-rich copper-lead-zinc Volcanogenic Massive Sulphide (“**VMS**”) discovery with a potential opportunity to develop into a viable economic resource. An initial National Instrument (“**NI**”) 43-101 mineral resource estimate that was recently completed on the Lemarchant deposit includes the following defined mineral resources:

- Indicated resource estimate: 1.24 million tonnes at an average grade of 5.38% Zn, 0.58% Cu, 1.19% Pb, 1.01 g/t Au and 59.17 g/t Ag; and
- Inferred resource estimate: 1.34 million tonnes at an average grade of 3.70% Zn, 0.41% Cu, 0.86% Pb, 1.00 g/t Au and 50.41 g/t Ag.

See Paragon Technical Report and Mineral Resource Estimate on Lemarchant Deposit, South Tally Pond VMS Project, Central Newfoundland, dated March 2, 2012 filed on SEDAR.

The Lemarchant deposit has been defined to a 210 m depth and remains open along strike and at depth. The exploration potential outside of the Lemarchant area of the South Tally Pond Property is still relatively untapped with numerous priority VMS targets that have seen limited or no drilling. Paragon is also exploring an excellent portfolio of gold properties through partner-funded and company-funded exploration programs.

Pursuant to the terms of the Agreement, Canadian Zinc will acquire all of the outstanding common shares of Paragon in exchange for common shares of Canadian Zinc by way of a statutory plan of arrangement on the basis of 0.136 of a share of Canadian Zinc for each share of Paragon (the “**Exchange Ratio**”).

Based on the closing share price of Canadian Zinc on the Toronto Stock Exchange (“**TSX**”) on July 30, 2012, the Exchange Ratio implies an offer price of C\$0.052 per Paragon common share and values Paragon’s equity at C\$2.8 million on a fully diluted in-the-money basis.

The consideration represents a total of C\$0.061 per Paragon share, based on the volume weighted average price of Canadian Zinc shares on the TSX for the 30 trading days ended July 20, 2012 and a premium of 52% to the volume weighted average price of Paragon shares on the TSX-Venture for the same period.

Upon completion of the Merger, Canadian Zinc and Paragon shareholders will own approximately 95.5% and 4.5% of the combined company, respectively.

John Kearney, Chairman and Chief Executive Officer of Canadian Zinc, commented, “*This merger with Paragon is consistent with Canadian Zinc’s strategy of building a growth focused base metal producer in North America and represents an excellent value opportunity for shareholders of both companies.*”

We believe that the addition of Paragon’s advanced exploration assets, such as the South Tally Pond VMS project in central Newfoundland, is a major step towards achieving our strategy of creating a strong intermediate base metal company with an attractive growth profile focused on enhancing shareholder value”.

Transaction Highlights

- Creation of a new, premier base and precious metals exploration and development company with high grade projects located in established mining jurisdictions in Canada.
- Allows Paragon shareholders to participate in the upside from the advancement of the Prairie Creek Project, one of the highest grade zinc projects in the world, through permitting, construction and production as well as the continued exploration and development of the South Tally Pond Project.
- The combined company will be better positioned to expand the current VMS resource and advance the South Tally Pond Project through feasibility studies.
- Provides Canadian Zinc entry into a well established mining district with significant potential for resource growth.
- Increased diversification across projects for Canadian Zinc and Paragon shareholders.
- Enhanced capital markets profile of the combined company.

Terms of the Business Combination between Canadian Zinc and Paragon

- Canadian Zinc will acquire all of the outstanding common shares of Paragon at an exchange ratio of 0.136 of a share of Canadian Zinc for each share of Paragon.
- Pursuant to the Agreement, Canadian Zinc will issue 7,296,298 shares of Canadian Zinc for 53,649,254 common shares of Paragon currently outstanding.

- The acquisition of the common shares of Paragon by Canadian Zinc will be accomplished by a statutory plan of arrangement, whereby Paragon will merge with a wholly owned subsidiary of Canadian Zinc.
- Upon completion of the Merger, all currently outstanding share purchase warrants and options of Paragon will be exercisable to acquire common shares of Canadian Zinc at the same Exchange Ratio.
- Completion of the Merger will be subject to, among other things, the favourable vote of 66 2/3% of the votes cast by Paragon shareholders and by a simple majority of the votes cast by “disinterested” Paragon shareholders pursuant to Multilateral Instrument 61-101 “Protection of Minority Shareholders in Special Transactions” at a special meeting called to approve the transaction which is expected to take place in September 2012.
- Completion of the Merger will be subject to receipt of necessary consents, approvals and other authorizations by applicable regulatory authorities and third parties approvals.

In the event that the Merger is not approved by Paragon shareholders, or if for any other reason (other than through the failure of Canadian Zinc to satisfy any conditions or perform any covenants provided for in the Agreement) the Merger is not completed, Canadian Zinc will be entitled to the immediate payment by Paragon of a “break fee” of C\$150,000.

The Agreement has been approved by the Board of Directors of Paragon. All of the Directors and Officers of Paragon have entered into lock-up agreements with Canadian Zinc under which they have agreed to vote their Paragon shares in favour of the Merger, representing approximately 2.7% of the shares entitled to vote at the Paragon special meeting.

Paragon and Canadian Zinc shareholders as well as all other interested parties are advised to read the materials relating to the Agreement that will be filed by Canadian Zinc and Paragon with securities regulatory authorities in Canada when they become available. Anyone may obtain copies of these documents when available free of charge at the Canadian Securities Administrators' website at www.sedar.com.

Terms of the Private Placement Financing in Paragon

Canadian Zinc has agreed to purchase in a non-brokered private placement financing, 7,000,000 common shares of Paragon (the “**Shares**”) at a price of C\$0.07 per share for a total consideration of C\$490,000. The closing of the Private Placement will be subject to acceptance by the TSX Venture Exchange and all other required regulatory approvals. The completion of the Private Placement is not conditional upon the completion of the Merger.

Canadian Zinc does not currently own, control or direct, directly or indirectly, any securities of Paragon and on the closing of the private placement will own 7,000,000 common shares of Paragon. On issuance, the Shares will represent approximately 11.54% of Paragon's issued and outstanding common shares, calculated on a non-diluted basis assuming that no outstanding convertible securities of Paragon are exercised.

Canadian Zinc will acquire the Shares for investment purposes, and will acquire the balance of all issued and outstanding Paragon shares on completion of the Transaction. An early warning report will be filed with applicable securities regulators which will be available on SEDAR (www.sedar.com) and a copy of which may be obtained by contacting Canadian Zinc as follows:

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About Canadian Zinc Corporation

Canadian Zinc is a Toronto-listed exploration and development company. The company's main project is the 100%-owned Prairie Creek zinc, silver and lead project located in the Northwest Territories, Canada. The Prairie Creek Project contains 5.4 million tonnes of Measured and Indicated resources with an average grade 10.8% Zn, 10.2% Pb, 0.31% Cu and 160 g/t Ag as well as 6.2 million tonnes of Inferred resources with an average grade of 14.5% Zn, 11.5% Pb, 0.57% Cu and 229 g/t Ag. (AMC Mining Consultants (Canada) Ltd. J M Shannon and D Nussipakynova, Qualified Persons, June 2012).

A portion of the Mineral Resources was converted to a Mineral Reserve estimate of 5.2 million tonnes grading 9.4% zinc, 9.5% lead and 151 g/t silver. A Pre-Feasibility study completed by SNC Lavalin for Canadian Zinc in June 2012 indicates a pre-tax net present value ("NPV") of \$253 million using an 8% discount, with an internal rate of return ("IRR") of 40.4% and payback period of 3 years based on long-term metal price projections of \$1.00/lb zinc, \$1.00/lb lead and \$26.00/oz silver (see Canadian Zinc press release dated June 27, 2012).

About Paragon Minerals Corporation

Paragon is a Canadian-based mineral exploration company focused on gold and base-metal exploration in Newfoundland and northwest Ontario. Paragon's flagship project is the 100%-controlled South Tally Pond VMS project where it is advancing a significant precious metal-rich massive sulphide deposit located in a producing base metal mining district in central Newfoundland. Paragon is also exploring an exceptional portfolio of gold properties through partner-funded and company-funded exploration programs. For more information, please visit the company's website at www.paragonminerals.com.

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Risk and Uncertainties

The Company's business and results of operations are subject to numerous risks and uncertainties, many of which are beyond its ability to control or predict. Because of these risks and uncertainties, actual results may differ materially from those expressed or implied by forward looking statements, and investors are cautioned not to place undue reliance on such statements, which speak only as of the date hereof.

Investors are advised to review the discussion of risk factors associated with the Company's business set out in the Company's Annual Information Form for the year ended December 31, 2011, which has been filed with the Canadian Securities Regulators on SEDAR (www.sedar.com). The risks and uncertainties, as summarized in the Company's MD&A and in other Canadian and U.S. filings, are not the only risks facing the Company. Additional risks and uncertainties not currently known to the Company, or that are currently deemed to be immaterial, also may materially adversely affect the Company's business, financial condition and/or operating results.

Alan Taylor, P.Geo., Chief Operating Officer, Vice President Exploration and a Director of Canadian Zinc Corporation, is responsible for the Company's exploration program, and is a Non-Independent Qualified Person for the purposes of National Instrument 43-101 and has approved this press release.

Cautionary Statement – Forward Looking Information

This press release contains certain forward looking information. This forward looking information includes, or may be based upon, estimates, forecasts, and statements as to management's expectations with respect to, among other things, the issue of permits, the size and quality of the company's mineral reserves and resources, future trends for the company, progress in development of mineral properties, the timing of exploration, development and mining activities, completion of financings and the merger, capital costs, mine production costs, demand and market outlook for metals, future metal prices and treatment and refining charges, the financial results of the company and future gold production and profitability of Vatukoula Gold Mines in which the Company has a significant shareholding. There can be no assurances that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. The Company does not currently hold a permit for the operation of the Prairie Creek Mine. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves. There is no certainty that mineral resources will be converted into mineral reserves.

Cautionary Note to United States Investors

The United States Securities and Exchange Commission ("SEC") permits U.S. mining companies, in their filings with the SEC, to disclose only those mineral deposits that a company can economically and legally extract or produce. We use certain terms in this press release, such as "measured," "indicated," and "inferred" "resources," which the SEC guidelines prohibit U.S. registered companies from including in their filings with the SEC. U.S. Investors are urged to consider closely the disclosure in our Form 40-F which may be secured from us, or from the SEC's website at <http://www.sec.gov/edgar.shtml>.