



PRESS RELEASE

CZN-TSX
CZICF-OTCBB

FOR IMMEDIATE RELEASE
August 7, 2008

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- **CANADIAN ZINC REPORTS SECOND QUARTER 2008 RESULTS**
 - **APPLICATIONS FOR OPERATING LICENCE/PERMIT FILED**
 - **AGREEMENT SIGNED WITH PARKS CANADA**
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Vancouver, British Columbia, August 7, 2008 - Canadian Zinc Corporation (TSX: CZN; OTCBB: CZICF) (the “Company” or “Canadian Zinc”) announces its financial results for the quarter ended June 30, 2008.

The Company’s principal focus is its efforts to advance the Prairie Creek Mine, a zinc/lead/silver property located in the Northwest Territories of Canada, towards production. The Prairie Creek Mine is partially developed with an existing 1,000 tonne per day mill and related infrastructure. In 2006 and 2007, the Company carried out major programs at Prairie Creek including driving a new internal decline approximately 600 metres long which enabled a significant underground exploration and infill drilling program to occur. A total of \$19.7 million has been invested in Prairie Creek since 2006 through to June 30, 2008. In May 2008 Canadian Zinc submitted the applications for the licences and permits for the operation of the Prairie Creek Mine.

As at June 30, 2008, Canadian Zinc had cash, cash equivalents and short term investments of \$26.4 million and a positive working capital balance of \$26 million. Accordingly, the Company believes that it remains in a strong position to further continue its planned exploration, development and permitting activities at the Prairie Creek Mine.

The Company reported a net loss for the quarter of \$152,000 compared to a loss of \$172,000 in the second quarter of 2007. For the six months ended June 30, 2008, the Company reported a net loss of \$375,000 compared to a net loss of \$236,000 in the equivalent period in 2007. The increased loss in the 2008 period was mainly attributable to stock-based compensation expense of \$185,000 relating to the vesting of stock options granted in prior periods; there was no equivalent charge in the six month period ended June 30, 2007.

This press release should be read in conjunction with the unaudited financial statements and notes thereto for the three and six months ended June 30, 2008, and management’s discussion & analysis (“MD&A”) for the quarter ended June 30, 2008, available on SEDAR at www.sedar.com

Applications for Operating Licence/Permit

On May 28, 2008, the Company applied to the Mackenzie Valley Land and Water Board (“MVLWB” or “Board”) for a Type “A” Water Licence and a Type “A” Land Use Permit (“LUP”) for the operation of the Prairie Creek Mine. The proposed new operation at Prairie Creek utilizes the existing infrastructure and facilities that were built in the 1980’s and which will be upgraded and enhanced to meet current-day environmental standards. The improvements proposed for specific site facilities will further mitigate the potential impact the Project may have on the environment. Specifically, the Company proposes to place waste rock and tailings permanently underground in a cemented backfill mix, use the existing large pond for temporary water storage, and place development rock in an engineered facility.

Subsequent to submitting the applications, the Company has responded to a number of requests for additional information from the Board. On July 14, 2008, the MVLWB advised the Company that all applications have now been deemed complete and that the Board is proceeding to the next stage of the regulatory process. The Board is moving forward with a preliminary screening of the application and has requested comments from interested parties by August 8, 2008.

Parks Canada Memorandum of Understanding (“MOU”)

On July 29, 2008, Parks Canada Agency (“Parks Canada”) and Canadian Zinc entered into a MOU with regard to the expansion of the Nahanni National Park Reserve and the development of the Prairie Creek Mine, whereby, amongst other items:

- Parks Canada and Canadian Zinc agree to work collaboratively, within their respective areas of responsibility, authority and jurisdiction, to achieve their respective goals of an expanded Nahanni National Park Reserve and an operating Prairie Creek Mine;
- Parks Canada recognizes and respects the right of Canadian Zinc to develop the Prairie Creek Mine and will manage the expansion of Nahanni National Park Reserve so that the expansion does not in its own right negatively affect development of, or reasonable access to and from, the Prairie Creek Mine; and
- Canadian Zinc accepts and supports the proposed expansion of the Nahanni National Park Reserve and will manage the development of the Prairie Creek Mine so the mine does not, in its own right, negatively affect the expansion of the Nahanni Park.

The MOU, which is valid for three years, is intended to cover the period up to the development of the Prairie Creek Mine (Phase I) and may be amended or renewed as agreed by the Parties and may be terminated by either Parks Canada or Canadian Zinc on not less than three months written notice. It is contemplated that the Phase I MOU will be replaced by a further MOU (Phase II) which will address the operation of the mine and the expanded Nahanni Park.

Other Permitting Activities

In April 2007, a Land Use Permit for use of the winter road, which connects the Prairie Creek mine with the Liard Highway, was obtained from the MVLWB. The Company applied for a Type "B" Water Licence in June 2007 in order to complete part of the road rehabilitation work along the Prairie Creek stream-bed and this Water Licence was issued on March 20, 2008. Authorization for this rehabilitation work was received from Fisheries and Oceans Canada on July 15, 2008.

Since 2001 the Company has successfully obtained seven permits for the exploration and development of the Prairie Creek property from the MVLWB, including two Type "B" Water Licences, four Land Use Permits for exploration activities and underground development and a winter road permit. Although the Company has experienced long delays in obtaining permits, and expects a continued lengthy process with its permitting activities, the Company has, to date, successfully carried out extensive programs at Prairie Creek in accordance with all regulatory requirements and in compliance with all permits and licences.

Risks 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 urged to review the discussion of risk factors associated with the Company's business set out below and in the Company's Annual Information Form for the year ended December 31, 2007, 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 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 resources, future trends for the company, progress in development of mineral properties, future production and sales volumes, capital costs, mine production costs, demand and market outlook for metals, future metal prices and treatment and refining charges, the outcome of legal proceedings, the timing of exploration, development and mining activities and the financial results of the company. 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 Concerning Estimates of Measured, Indicated or Inferred Resources

The information presented herein uses the terms “measured”, “indicated” and “inferred” mineral resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize these terms. “Inferred mineral resources” have significant uncertainty as to their existence, and as to their economic feasibility. United States investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically mineable. It cannot be assumed that all or any part of an inferred mineral resource would ever be upgraded to a higher category. United States investors are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted into mineral reserves.

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