



PRESS RELEASE

CZN-TSX
CZICF-OTCQB

FOR IMMEDIATE RELEASE
May 16, 2012

-
- **CANADIAN ZINC REPORTS FINANCIAL RESULTS FOR FIRST QUARTER 2012**
 - **Continued progress on Prairie Creek Project**
-

Vancouver, British Columbia, May 16, 2012 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) (the "Company", "Canadian Zinc" or "CZN") announces its financial results for the three month period ended March 31, 2012.

Financial Results March 31, 2012

For the three months ended March 31, 2012, the Company reported a net loss and comprehensive loss of \$2,532,000 compared to net loss and comprehensive loss of \$14,244,000 for the three months ended March 31, 2011. The net loss in the three months ended March 31, 2012 included a mark-to-market loss of \$1,509,000 on the Company's shares in Vatukoula Gold Mines plc, compared to a mark to marked loss of \$12,880,000 in the three months ended March 31, 2011. Excluding the loss on the shares in Vatukoula, the Company recorded a loss of \$1,023,000 in the first quarter of 2012, compared to a similar loss of \$1,364,000 in the same period last year.

At March 31, 2012, the Company had a positive working capital balance of \$27,086,000 including cash and cash equivalents of \$1,603,000, short term investments of \$13,677,000 and marketable securities of \$12,198,000 (for a total of \$27,478,000).

Prairie Creek Mine

Prairie Creek Development Plan and Feasibility Study

In February 2011, the Company engaged SNC-Lavalin Inc. ("SNC") of Vancouver to assist in the ongoing development of the Prairie Creek Project and to complete a feasibility study on the Prairie Creek Mine.

The scope of SNC's work includes detailed engineering and design, including mining equipment, on-site and off-site infrastructure, transportation and logistics; capital and operating cost estimates for underground mining, preliminary designs of stoping methods and layouts; capital cost estimates for the rehabilitation and upgrade of the processing plant, power plant and water treatment and storage ponds; construction schedule and execution plan. Much of this work was completed during 2011.

The SNC work has progressed during 2012 with primary focus on water treatment, storage facilities, milling and processing costs. In particular, a power load schedule was developed for the mill and site facilities in order to determine the amount of power generation required to support the proposed mining operation. Quotes have been requested for diesel generation units that also utilize a heat

recovery system to further support the needs of the mine site. Further engineering design was completed on water treatment plant, concentrate storage sheds and water storage ponds.

In addition, AMC Consultants was retained to provide an updated independent resource calculation for the Prairie Creek Mine which will also be incorporated into the feasibility work program.

It is expected that a report covering the first stages of SNC's work will be completed during the second quarter of 2012 and will generate capital costs estimates for the rehabilitation and upgrading of the mill, power plant and water treatment and storage ponds, as well as working cost estimates for mining, processing and transportation. It had been anticipated that SNC would complete the feasibility study in the first quarter of 2012; however, this work has been slightly delayed by the decision, because of regulatory disclosure requirements, to obtain an up-to-date independent resource estimate, and by delays in obtaining certain technical specifications and cost estimates.

Based on the work to date and pending receipt of the SNC report, the Company currently anticipates that the additional capital required to install the planned new facilities and to bring the Prairie Creek Mine into production will, subject to final design and operating permit conditions, be in the range of \$150 to \$160 million. This anticipated capital cost is somewhat higher than the Company's previous estimates, which were in the range of \$120 million, largely as a result of the inclusion of some new features, additional water storage facilities and general cost inflation.

Further site investigation and geotechnical work will continue during the summer of 2012 and will be incorporated, along with updated permitting parameters, into a second report planned to be completed later in 2012, which updated report would form the basis of a formal feasibility study.

2012 Prairie Creek Site Programs

The Prairie Creek Mine Site was re-opened in early April, 2012 and is undergoing maintenance and repair of equipment in preparation for the upcoming summer activity. An airlift of equipment was undertaken in early May which included mobilisation of an auger drill rig contracted from Mobile Augers and Research Ltd., in Edmonton. The auger drill is scheduled to complete a series of geotechnical holes around the various site facilities and proposed new facilities, including the water storage pond and waste rock pile areas, in order to complete further engineering studies for design and construction purposes. A series of hydrological wells are also planned to be drilled to further detail and monitor the groundwater hydrology of the site area in preparation for mining activities.

The Company also plans to conduct further technical work to assist in this process and will involve further planning and design, site investigations to further assess the existing infrastructure, optimize the mill plan layout and further assess the transportation corridor. Further data gathering and testing of specific mine aspects, mainly related to water treatment and management, are expected to continue as part of regulatory phase of the permitting process.

Further geotechnical evaluation and studies of the road route through Nahanni National Park Reserve and adjacent areas are also planned. These will include assessment of bridge crossings, reducing steep grades and further substratum assessment. A detailed aerial LIDAR survey is planned to be completed by McElhanney Surveying, utilizing fixed wing aircraft, when field conditions permit. This survey will provide an accurate baseline for route planning of the re-aligned road route areas, resulting from the recent Environmental Assessment, and also provide a solid basis for construction planning.

With a flow-through exploration budget of \$2.5 million, the Company plans to continue the deep-hole diamond drill exploration program at Casket Creek utilizing the Company's TM-2500 coring rig, approximately 1.6 kilometres north of the most northern drillhole that defines the present mineral resource. It is planned to continue for the first part of the summer in the Casket Creek area in order to complete wedging some drill holes around last year's intercept in hole PC-11-187W2 which intersected 5% Pb and 11% Zn over 3.5 metres of core length. After completion of this phase of drilling at Casket Creek the drill rig will be moved back south, closer to the Prairie Creek Mine Site, to drill in the area between the northern extent of the currently defined resource and the Casket Creek area.

At the same time the Company's Longyear drill rig will focus on infill areas closer to minesite and within the defined resource. Specific targets will be areas that have the potential to be upgraded from the inferred category to the indicated resource category. Most of these holes will be targeted at depth and along strike in the proximity of the known underground workings. The Company has contracted Cabo Drilling (Pacific) Corp to supply manpower and technical supervision for the 2012 drilling program.

Training

The Company has begun onsite training programs which will take place at the Prairie Creek Mine Site. These training programs are being undertaken with assistance from the Federal Government, Human Resources and Skills Development Canada, in the *"More Than a Silver Lining"* aboriginal training program, specifically for the Prairie Creek Mine, and administered by the NWT Mine Training Society. These programs include training for safety officers, diamond drilling operators, geological field assistants and camp catering. Other training programs, which will occur off-site, are currently being planned and co-ordinated by the Company and the Mine Training Society which has opened an office and training center in Fort Simpson.

Permitting Activities

The Company's principal focus has been to advance the Prairie Creek Property towards receiving a Class "A" Water Licence and associated Land Use Permits, through the regulatory process established under the Mackenzie Valley Resource Management Act, that will permit the further development and subsequent mine production at Prairie Creek.

After successful completion of a nearly four year environmental assessment process, Mackenzie Valley Environmental Impact Review Board (the "Review Board") issued its *Report of Environmental Assessment and Reasons for Decision* on December 8, 2011. The Review Board concluded that the proposed development of the Prairie Creek Mine is not likely to have any significant adverse impacts on the environment or to be a cause for significant public concern.

In January 2012, the Mackenzie Valley Land and Water Board (the "Water Board") commenced the regulatory process for the issue of a Class "A" Water Licence and Land Use Permit for the operation of the Prairie Creek Mine. In February 2012, the Company submitted a Consolidated Project Description ("CPD"), highlighting the changes that resulted from commitments made by Canadian Zinc during the environmental assessment process.

The Water Board has now completed its review of the information contained in the application, Environmental Assessment and the CPD and has issued a Directive on the additional information that is required by the Water Board at this stage of the Regulatory Process. The Water Board has also issued a Work Plan to be followed towards the issue of these permits which envisages completion of

the Public Hearing, required by the *Mackenzie Valley Resource Management Act*, in November and the issue of a draft water licence by December 23, 2012.

Subsequent to the end of the first quarter a number of new permits for the ongoing development of the Prairie Creek Mine Project have been approved by the Mackenzie Valley Land and Water Board.

The Water Board has issued a new Class 'A' Land Use Permit MV2012C0008 for the activity of underground decline development, for a period of five years commencing May 10, 2012 and expiring May 9, 2017. The new Land Use Permit entitles CZN to conduct mining exploration and associated activities, including underground decline development, at the Prairie Creek Mine.

The Water Board has also approved an amendment and extension to the Company's existing Class "B" Water Licence, MV2001L2-0003, for the management, treatment and discharge of mine water from the mine site. The Water Licence has now been amended to cover the underground development of the new decline, including pumping, treatment and discharge of water inflows using the existing water treatment infrastructure, and placement of waste rock on an existing waste rock pile. The term of the water licence has been extended to September 9, 2019.

The Water Board has approved an extension of the Company's Land Use Permit MV2003F0028 for the use of the road that connects the Prairie Creek Mine to the Liard Highway. The LUP for use and maintenance of the existing access road alignment has been extended for a term of two years until April 2014. This permit will allow CZN to undertake road rehabilitation work from the Mine to the boundary of the Nahanni National Park Reserve, and prepare the road for operational use.

Outlook

Canadian Zinc's continued focus for 2012 will be to advance the Prairie Creek permit applications through the regulatory phase, to the issue of permits allowing for production.

The recent issue of a new underground development permit and the extensions of the Company's current water licence and road permits represent significant steps forward that will enable the continuation of the ongoing development of the Prairie Creek Mine. The Work Plan issued by the Water Board generally meets the Company's expectations and provides a schedule and key dates for the issue of a draft Class "A" Water Licence before this year end.

Working with SNC Lavalin and other consultants, the Company plans to advance the development of the Prairie Creek Project. It is expected that a report covering the first stages of SNC's work will be completed during the second quarter of 2012. Further site investigation and geo-technical work, under the direction of SNC, will continue during the summer of 2012 and it is expected that a second report will be completed later in 2012, which updated report would form the basis of a formal feasibility study.

As part of the ongoing mine development process the Company also plans to engage in discussions with various smelters and metal traders with regard to the processing and marketing of the lead and zinc concentrates expected to be produced by the Prairie Creek Mine.

The Company has recently commenced its 2012 exploration and development programs at the Prairie Creek Mine Site. With an exploration budget of \$2.5 million, the Company plans to continue the deep-hole diamond drill exploration program at Casket Creek, and also to continue exploration in the immediate vicinity of the Prairie Creek Mine.

At March 31, 2012 the Company had working capital of \$27 million and is well positioned to carry out its planned 2012 programs.

Qualified Person

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.

Risks and Uncertainties

This press release should be read in conjunction with the unaudited interim financial statements and notes thereto, and management's discussion & analysis ("MD&A") for the three ended March 31, 2012, both available on SEDAR at www.sedar.com. The Company's unaudited interim financial statements have been prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting* using accounting policies consistent with International Financial Reporting Standards as issued by the International Accounting Standards Board.

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.

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, the timing of exploration, development and mining activities, completion of financings, 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 VGM. 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.

For further information contact:

John F. Kearney

Chairman

(416) 362-6686

Suite 700 – 220 Bay Street
Toronto, ON M5J 2W4

Fax: (416) 368-5344

Alan B. Taylor

VP Exploration & Chief Operating Officer

(604) 688-2001

Suite 1710 – 650 West Georgia Street,
Vancouver, BC V6B 4N9

Fax: (604) 688-2043

Tollfree: 1-866-688-2001

Steve Dawson

VP Corporate Development

(416) 203-1418

Suite 700 – 220 Bay Street
Toronto, ON M5J 2W4

Fax: (416) 368-5344

E-mail: invest@canadianzinc.com

Website: www.canadianzinc.com