

PRESS RELEASE

CZN-TSX CZICF-OTCQB FOR IMMEDIATE RELEASE September 5, 2013

CANADIAN ZINC RECEIVES PERMITS FROM PARKS CANADA FOR PRAIRIE CREEK MINE ACCESS ROAD

Vancouver, British Columbia September 5, 2013 - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) (the "Company" or "Canadian Zinc") is very pleased to announce that Parks Canada has issued a Land Use Permit ("LUP") and Type "B" Water Licence ("WL") for the construction and operation of that part of the access road to the Prairie Creek Mine which passes through the Nahanni National Park Reserve ("NNPR").

Parks Canada has issued permits Parks2012_W001 WL and Parks2012-L001 LUP, both valid for a period of five years valid until August 28, 2018. The permits authorize road access through NNPR to connect sections of road outside the Park permitted by the Mackenzie Valley Land and Water Board ("MVLWB").

With the issue of these two permits, Canadian Zinc now holds all land use permits and water licences required for the construction and operation of the entire 184 kilometre access road which connects the Prairie Creek Mine to the Liard Highway and for the construction of two transfer and staging facilities along the road, one near the Liard River crossing and the second inside the Park at about the half way mark.

"Canadian Zinc and Parks Canada continue to work cooperatively together and the timely issue of these permits further reinforces the spirit of the Memorandum of Understanding wherein Parks Canada and Canadian Zinc agreed to work collaboratively, within respective areas of responsibility, authority and jurisdiction, to achieve respective goals of managing Nahanni National Park Reserve and an operating Prairie Creek Mine." said Alan Taylor COO of Canadian Zinc.

"Canadian Zinc also acknowledges the cooperative management relationship Parks Canada shares with the Dehcho First Nations in the management of Nahanni National Park Reserve." added **Mr. Taylor**.

In order to ensure a harmonized regulatory process, the conditions in the Parks Canada permits largely mirror those in the Land Use permits previously issued to the Company by the MVLWB, in respect of that portion of the road that runs outside the NNPR.

The Prairie Creek Mine is located in the Mackenzie Mountains of the Northwest Territories, within the watershed of the South Nahanni River and in proximity to but outside the NNPR, which currently encircles the Prairie Creek Mine. Mine operations are proposed at Prairie Creek via a winter access road which crosses the expanded NNPR area to the east of the mine.

Nahanni National Park Reserve

Expanded in 2009, NNPR covers over 30,000 km² and now adjoins the recently created 4,850 km² Nááts'ihch'oh National Park Reserve at the South Nahanni River headwaters. The NNPR centered on the river valleys of the South Nahanni and Flat rivers in the southwest part of the Northwest Territories protects a portion of the Mackenzie Mountains Natural Region and is an outstanding example of northern wilderness rivers, canyons, gorges and alpine tundra.

The NNPR is managed by Parks Canada which works to ensure that Canada's historic and natural heritage is presented and protected for the enjoyment, education and appreciation of all Canadians, today and in the future.

In 2009, the Canada National Parks Act was amended to expand Nahanni National Park Reserve and to enable the Minister of the Environment to grant leases, licences of occupation of, and easements over, public lands situated in the expansion area for the purposes of a mining access road leading to the Prairie Creek Area, including the sites of storage and other facilities connected with that road.

Prairie Creek Mine

The Prairie Creek Mine is partially developed with an existing 1,000 tonne per day mill and related infrastructure.

On December 8, 2011, the Mackenzie Valley Environmental Impact Review Board ("Review Board") issued its *Report of Environmental Assessment and Reasons for Decision* for the Company's proposed Prairie Creek Mine. 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. The Review Board concluded that an environmental impact review of this proposed development is not necessary and that the Prairie Creek Mine project should proceed to the regulatory phase for approvals.

The MVLWB completed its regulatory process July 5, 2013 by finalizing a Type "A" Water Licence and forwarding it to the Minister of Aboriginal Affairs and Northern Development Canada with the recommendation that the Minister approve and sign the Licence. The MVLWB has previously issued three Land Use Permits and a Type "B" Water Licence to the Company for future operations. Upon Ministerial approval of the Type "A" Water Licence, the Company will possess all permits necessary to support future mining and milling operations at Prairie Creek.

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Cautionary Statement – Forward-Looking Information

This press release contains certain forward-looking information, including, among other things, the expected completion of acquisitions and the advancement of mineral properties. 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 completion of transactions, the issue of permits, the size and quality of 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, acquisition of shares in other companies 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

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.