Use of LNG as Alernative Energy Source for the Prairie Creek Mine

CZN-TSX CZICF-OTCQB

VANCOUVER, Feb. 14, 2017 /CNW/ - Canadian Zinc Corporation (TSX: CZN; OTCQB: CZICF) ("the Company" or "Canadian Zinc") is pleased to announce the signing of Memorandum of Understanding ("MOU") with Northwest Territories Power Corporation ("NTPC") to examine the supply of electrical power for the development and operation of the Prairie Creek Mine in the Northwest Territories, Canada.

In the MOU, NTPC has agreed to work with Canadian Zinc to assess (a) how NTPC could supply the primary electrical energy source to the mine and (b) how NTPC could install generating and connection facilities or other infrastructure assets to provide such electricity supply.

CZN and NTPC have also agreed to evaluate the integration of other energy alternatives, and specifically Liquefied Natural Gas ("LNG"), as part of the energy supply for the mine.

Emanuel DaRosa, President and CEO of NTPC, stated "NTPC is pleased to be working with Canadian Zinc to investigate how we can provide energy for the Prairie Creek Mine. A successful partnership would benefit all Power Corporation customers and contribute to economic development in the Northwest Territories."

NTPC is currently investigating the potential to supply LNG for the generation of electricity in local communities to reduce dependency on diesel fuel, including Fort Simpson, where the LNG would be delivered along the same existing highway network that would be used to supply the Prairie Creek Mine.

Alan Taylor, Chief Operating Officer for Canadian Zinc, stated "The Prairie Creek Mine would gain environmental and economic benefits from use of LNG as an alternative source of energy. This would reduce the dependency on diesel fuel by replacing it with LNG, which is a lower cost and much more environmentally friendly source of fuel for power generation."

LNG has been a dependable fuel for decades and continues to demonstrate a strong track record of safe usage, transportation and storage, which are important considerations for the Prairie Creek Mine.

"The development of LNG production facilities in northern BC and the recent discovery of natural gas in the Liard/Horn River Basins of the NWT, which are located adjacent to the existing highway haulage route, has made the potential use of LNG to be delivered to the Mine by the proposed all season road, currently in the advanced phase of the Environmental Assessment permitting process, a viable alternative energy source for the Prairie Creek Mine" added Alan Taylor.

Use of LNG for power generation has significant benefits for the environment as typical emissions are much lower than diesel fuel sources, with greenhouse gas reduction of between 11% and 20%, NOx emissions reduced by 80% and particulate emissions reduced by 75%. Furthermore, in the unlikely event of any spill, LNG would evaporate immediately and dissipate quickly into the atmosphere without causing any environmental impact to soil, groundwater or surface waters.

About Northwest Territories Power Corporation (NTPC)

NTPC is a wholly owned subsidiary of NT Hydro, which is 100% owned by the Government of the Northwest Territories. NTPC exists to provide value to its shareholder and customers through the efforts of a highly dedicated, skilled, and productive workforce. Its mission is to generate, transmit and distribute electricity in a safe, reliable, efficient and environmentally sound manner; striving to reduce reliance on fossil fuels.

NTPC's vision is to be the provider of choice to customers, a valuable partner to industry and Aboriginal groups in the NWT, as well as a performance leader in the utility industry. NTPC will also work with stakeholders to support development of the tremendous resource potential of the NWT in a sustainable and responsible manner creating long term benefits for its customers and residents alike.

About the Prairie Creek Mine

The Prairie Creek Project is presently undergoing a Definitive Feasibility Study to be completed by AMC Mining Consultants (Canada) Ltd., and Ausenco Engineering Canada Inc. A Preliminary Feasibility Study was previously completed in March 2016.

Over the 17 year mine-life, Prairie Creek's projected average annual mine production is expected to be approximately 60,000

tonnes of zinc concentrate and 55,000 tonnes of lead concentrate containing approximately 86 million pounds of zinc, 82 million pounds of lead, and 1.7 million ounces of silver.

There remains good potential for additional project optimization, enhanced economics and further extending the life of the Prairie Creek Mine.

The Prairie Creek Mine hosts proven and probable Mineral Reserves of 7.60 million tonnes averaging 8.93% zinc, 8.33% lead, and 127.58 g/t silver within Measured and Indicated Mineral Resources of 8.70 million tonnes grading 9.5% zinc, 8.9% lead and 136 g/t silver. In addition, the Technical Report confirms a large Inferred Mineral Resource of 7.05 million tonnes grading 11.3% zinc, 7.7% lead and 166 g/t silver and additional exploration potential. An amended Technical Report was filed under the Company's profile on www.sedar.com in September 2016.

## About Canadian Zinc

Canadian Zinc is a TSX-listed exploration and development company trading under the symbol "CZN". The Company's key project is the 100%-owned Prairie Creek Project, a fully permitted, advanced-staged zinc-lead-silver property, located in the Northwest Territories. Canadian Zinc also owns an extensive land package in central Newfoundland that it is exploring for copper-lead-zinc-silver-gold deposits.

Qualified Person: Alan Taylor, P.Geo., Vice President of Exploration, Chief Operating Officer and Director of the Company, who is a Non-Independent Qualified Person as defined in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"), has prepared, supervised the preparation of or reviewed, the parts of this News Release that are of a scientific or technical nature.

Cautionary Statement – Forward-Looking Information

This press release contains certain forward-looking information, including, among other things, 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. 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.

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