

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**FORM 40-F**

REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE  
SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2012

Commission file number: 0-22216



**Canadian Zinc Corporation**

(Exact Name of Registrant as Specified in its Charter)

<b>British Columbia, Canada</b>	<b>1400</b>	<b>N/A</b>
(Province or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code)	(I.R.S. Employer Identification No.)

**650 West Georgia Street, Suite 1710**  
**Vancouver, British Columbia, Canada V6B 4N9**  
**(604) 688-2001**

(Address and Telephone Number of Registrant's Principal Executive Offices)

**CT Corporation System**  
**111 Eighth Avenue, New York, NY 10011**  
**(212) 590-9070**

(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act: **None**

Securities registered or to be registered pursuant to Section 12(g) of the Act: **Common Shares, no par value**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

For Annual Reports, indicate by check mark the information filed with this form:

Annual Information Form  Audited Annual Financial Statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the Annual Report: As at December 31, 2012, 164,031,781 common shares of the Registrant were issued and outstanding.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

## **EXPLANATORY NOTE**

Canadian Zinc Corporation (the “Company” or the “Registrant”) is a Canadian issuer eligible to file its Annual Report pursuant to Section 13 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), on Form 40-F pursuant to the multi-jurisdictional disclosure system of the Exchange Act. The Company is a “foreign private issuer” as defined in Rule 3b-4 under the Exchange Act. Equity securities of the Company are accordingly exempt from Sections 14(a), 14(b), 14(c), 14(f) and 16 of the Exchange Act pursuant to Rule 3a12-3 under the Exchange Act.

## **FORWARD-LOOKING STATEMENTS**

This Annual Report contains forward-looking statements that are made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and under Canadian securities laws that involve a number of risks and uncertainties. Such statements are based on the Company’s current expectations, estimates and projections about the industry, management’s beliefs and certain assumptions made by it. We use words such as “expect,” “anticipate,” “project,” “believe,” “plan,” “intend,” “seek,” “should,” “estimate,” “future” and other similar expressions to identify forward-looking statements. The Company’s actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors.

Statements about planned/proposed mine operations or anticipated future operating descriptions included in the Company’s Technical Report, Pre-Feasibility Study, Project Description Report, (filed with Canadian regulators for permitting requirements), expectations around the process or expected completion dates for obtaining operating permits, the impact on the Company of future accounting standards, discussions of risks and uncertainties, capital cost estimates, anticipated commencement dates of mining or metal production operations, projected quantities of future metal production and anticipated production rates, operating efficiencies, costs and expenditures, business development efforts, the need for additional capital and the Company’s production capacity and other statements listed in the Company’s Annual Information Form under the heading “Cautionary Note – Forward-Looking Statements” are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, the Company’s actual results could differ materially and adversely from those expressed in any forward-looking statements as a result of various factors. You should not place undue reliance on these forward-looking statements.

Information relating to the magnitude or quality of mineral deposits is deemed to be forward-looking information. The reliability of such information is affected by, among other things, uncertainty involving geology of mineral deposits; uncertainty of estimates of their size or composition; uncertainty of projections relating to costs of production or estimates of market prices for the mineral; the possibility of delays in mining activities; changes in plans with respect to exploration, development projects or capital expenditures; and various other risks including those relating to health, safety and environmental matters.

The Company cautions that the list of factors set forth above is not exhaustive. Some of the risks, uncertainties and other factors which negatively affect the reliability of forward-looking information are discussed in the Company's public filings with the Canadian securities regulatory authorities, including its most recent Annual Report, quarterly reports, material change reports and press releases, and with the United States Securities and Exchange Commission (the "SEC"). In particular, your attention is directed to the risks detailed and described further in the Annual Information Form of the Company under the heading "Risk Factors" concerning some of the important risk factors that may affect its business, results of operations and financial conditions. You should carefully consider those risks, in addition to the other information in this Annual Report and in the Company's other filings and the various public disclosures before making any business or investment decisions involving the Company and its securities.

The Company undertakes no obligation to revise or update any forward-looking statement, or any other information contained or referenced in this Annual Report to reflect future events and circumstances for any reason, except as required by law. In addition, any forecasts or guidance provided by the Company are based on the beliefs, estimates and opinions of the Company's management as at the date of this Annual Report and, accordingly, they involve a number of risks and uncertainties. Consequently, 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. Except as required by law, the Company undertakes no obligation to update such projections if management's beliefs, estimates or opinions, or other factors should change.

#### **NOTE TO UNITED STATES READERS- DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES**

The Company is permitted, under the multi-jurisdictional disclosure system adopted by the United States Securities and Exchange Commission (the "SEC"), to prepare this Annual Report on Form 40-F in accordance with Canadian disclosure requirements, which differ from those of the United States. The Company has prepared its financial statements, which are filed as Exhibit 99.2 to this Annual Report on Form 40-F, in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). They are not comparable to financial statements of United States companies.

#### **RESOURCE AND RESERVE ESTIMATES**

The Company's Annual Information Form filed as Exhibit 99.1 to this Annual Report on Form 40-F has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") - *CIM Definition Standards on Mineral Resources and Mineral Reserves*, adopted by the CIM Council, as amended. These definitions differ from the definitions in SEC Industry Guide 7 under the United States Securities Act of 1933, as amended (the "Securities Act"). Under SEC Industry Guide 7 standards, a "final" or "bankable" feasibility study is required to report reserves, the three-year historical average price is used in any reserve or cash flow

analysis to designate reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority.

In addition, the terms “mineral resource”, “measured mineral resource”, “indicated mineral resource” and “inferred mineral resource” are defined in and required to be disclosed by NI 43-101; however, these terms are not defined terms under SEC Industry Guide 7 and are normally not permitted to be used in reports and registration statements filed with the SEC. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves. “Inferred mineral resources” have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Disclosure of “contained ounces” or “contained metal” in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute “reserves” by SEC Industry Guide 7 standards as in place tonnage and grade without reference to unit measures.

**U.S. Investors should note that Canadian Zinc Corporation DOES NOT currently disclose any SEC Industry Guide 7 mineral reserves with regard to its mineral deposits at the Prairie Creek Mine site.**

*Cautionary Note to Investors concerning estimates of Measured and Indicated Resources*

This document uses the terms “measured resources” and “indicated resources.” Investors are advised that while those terms are recognized and required by Canadian regulations, the SEC does not recognize them.

**Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves.**

*Cautionary Note to Investors concerning estimates of Inferred Resources*

This document uses the term “inferred resources.” Investors are advised that while those terms are recognized and required by Canadian regulations, the SEC does not recognize them. “Inferred Resources” have significant uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases.

**Investors are cautioned not to assume that all or part of an inferred resource exists, or is economically or legally mineable.**

**Accordingly, information contained in this Annual Report on Form 40-F and the documents incorporated by reference herein contain descriptions of the Company's mineral deposits that may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations thereunder.**

**U.S. investors are urged to consider closely the disclosure in this Annual Report.**

## **CURRENCY**

Unless otherwise indicated, all dollar amounts in this Annual Report on Form 40-F are in Canadian dollars. The exchange rate of Canadian dollars into United States dollars, on December 31, 2012, based upon the noon rate of exchange as quoted by the Bank of Canada was U.S.\$1.00 = Cdn.\$0.9949.

## **ANNUAL INFORMATION FORM**

The Company's Annual Information Form (the "AIF") for the fiscal year ended December 31, 2012 is filed as Exhibit 99.1 to this Annual Report on Form 40-F, and is incorporated by reference herein.

## **AUDITED ANNUAL FINANCIAL STATEMENTS**

The audited financial statements of the Company for the years ended December 31, 2012 and 2011 including the report of the independent auditor with respect thereto, are filed as Exhibit 99.2 to this Annual Report on Form 40-F, and is incorporated by reference herein.

## **MANAGEMENT'S DISCUSSION AND ANALYSIS**

The Company's management's discussion and analysis ("MD&A") is filed as Exhibit 99.3 to this Annual Report on Form 40-F, and is incorporated by reference herein.

## **TAX MATTERS**

Purchasing, holding, or disposing of securities of the Company may have tax consequences under the laws of the United States and Canada that are not described in this Annual Report on Form 40-F.

## CONTROLS AND PROCEDURES

### *Disclosure Controls and Procedures*

At the end of the period covered by this Annual Report on Form 40-F for the fiscal year ended December 31, 2012, an evaluation was carried out under the supervision of, and the with the participation of, the Company's management, including its Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) of the Exchange Act). Based upon that evaluation, the Company's CEO and CFO have concluded that the disclosure controls and procedures were designed and effective to give reasonable assurance that the information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and (ii) accumulated and communicated to management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

### *Management's Report on Internal Control over Financial Reporting*

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) under the Exchange Act. A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements. It should be noted that a control system, no matter how well conceived or operated, can only provide reasonable assurance, not absolute assurance, that the objectives of the control system are met. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies and procedures may deteriorate.

Management, including the CEO and CFO, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2012. In making this assessment, management used the criteria set forth in the Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management has concluded that, as of December 31, 2012, the Company's internal control over financial reporting was effective and no material weaknesses in the Company's internal control over financial reporting were discovered.

The Company is required to provide an auditor's attestation report on its internal control over financial reporting for the fiscal year ended December 31, 2012. In this Annual Report on Form 40-F, the Company's independent registered auditor, Ernst & Young LLP, must state its opinion as to the effectiveness of the Company's internal control over financial reporting for the fiscal year ended December 31, 2012. Ernst & Young LLP has audited the Company's financial statements included in this Annual Report on Form 40-F and has issued an attestation report on the Company's internal control over financial reporting.

#### *Auditor's Attestation Report*

The attestation of Ernst & Young LLP on the Company's internal control over financial reporting is contained in the auditors report included in the audited financial statements of the Company for the years ended December 31, 2012 and 2011, which are filed as Exhibit 99.2 and incorporated by reference in this Annual Report on Form 40-F.

#### *Changes in Internal Control over Financial Reporting*

There have been no changes in the Company's internal control over financial reporting during its fiscal year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### **CORPORATE GOVERNANCE**

The Company has a separately designated Compensation Committee. The Company's Board of Directors has determined that the Compensation Committee are comprised of independent directors, based on the requirements for independence under Rule 10A-3 of the Exchange Act and Section 803A of the NYSE Amex Company Guide. The Company's Compensation Committee Charter may be found on the Company's website at [www.canadianzinc.com](http://www.canadianzinc.com).

#### *Compensation Committee*

The members of the Compensation Committee are as follows:

Brian A. Atkins (Chair);

John A. MacPherson; and

Dave Nickerson.

The Compensation Committee has the authority to engage and compensate any outside advisors that it determines to be necessary to permit it to carry out its duties and to conduct or authorize investigations into any matters within the scope of its responsibilities. The Committee may create one or more subcommittees and may delegate, in whole or in part, its duties and responsibilities to such subcommittees or to individual members of the Committee.

## AUDIT COMMITTEE

### *Audit Committee*

The Company has a separately designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act.

The Company's Audit Committee is composed of Brian A. Atkins (Chair), John A. MacPherson and Dave Nickerson, all of whom, in the opinion of the Board of Directors, are independent, as determined under Rule 10A-3 of the Exchange Act and Section 803A of the NYSE Amex Company Guide. All three members of the Audit Committee are financially literate, meaning they are able to read and understand the Registrant's financial statements and to understand the breadth and level of complexity of the issues that can reasonably be expected to be raised by the Company's financial statements. Please refer to the Company's Annual Information Form attached as Exhibit 99.1 to this Annual Report on Form 40-F for details in connection with each of these members and their qualifications.

The members of the Audit Committee do not have fixed terms and are appointed and replaced from time to time by resolution of the directors.

The Audit Committee meets with the CEO, the COO, the CFO and the Company's independent auditors to review and inquire into matters affecting financial reporting, the system of internal accounting and financial controls, as well as audit procedures and audit plans. The Audit Committee also recommends to the Board of Directors which independent registered public auditing firm should be appointed by the Company. In addition, the Audit Committee reviews and recommends to the Board of Directors for approval the annual financial statements and the MD&A, and undertakes other activities required by exchanges on which the Company's securities are listed and by regulatory authorities to which the Company is held responsible.

The full text of the Audit Committee Charter is contained in Section 11.1 of the Company's Annual Information Form, attached hereto as Exhibit 99.1.

### *Audit Committee Financial Expert*

The Company's Board of Directors has determined that Brian A. Atkins qualifies as a financial expert, as defined in Item 407(d)(5) of Regulation S-K under the Exchange Act, in that he has an understanding of generally accepted accounting principles and financial statements; is able to assess the general application of accounting principles in connection with the accounting for estimates, accruals and reserves; has experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues comparable to the breadth and level of complexity of issues that can reasonably be expected to be raised by the Company's financial statements; has an understanding of internal controls and procedures for financial reporting; and has an understanding of audit committee functions.

## **PRINCIPAL ACCOUNTING FEES AND SERVICES – INDEPENDENT AUDITORS**

The required tabular disclosure is included in section 11.4 under in the Company's Annual Information Form for the fiscal year ended December 31, 2012, filed as Exhibit 99.1 to this Annual Report on Form 40-F and is incorporated herein by reference.

### **PRE-APPROVAL OF AUDIT AND NON-AUDIT SERVICES PROVIDED BY INDEPENDENT AUDITORS**

The Audit Committee nominates and engages the independent auditors to audit the financial statements and approves all audit, audit-related services, tax services and other services provided by the Company's external auditors. To minimize relationships that could appear to impair the objectivity of the Company's independent auditors, the Audit Committee has restricted the non-audit services that the Company's independent auditors may provide primarily to tax services, review assurance services and advisory services. Any services provided by the Company's external auditors that are not specifically included within the scope of the audit must be pre-approved by the Audit Committee prior to any engagement. In general, the Company seeks to obtain non-audit services from its independent auditors only when the services offered by the Company's independent auditors are more effective or economical than services available from other service providers, and, to the extent possible, where appropriate, only after competitive bidding.

### **OFF-BALANCE SHEET TRANSACTIONS**

The Company does not have any off-balance sheet financing arrangements or relationships with unconsolidated special purpose entities.

### **CODE OF ETHICS**

The Company adopted a Code of Business Conduct and Ethics (the "Code") for all its directors, senior officers and employees of the Company. The Code meets the requirements for a "code of ethics" within the meaning of that term in Form 40-F. The Code is available on the Company's website at [www.canadianzinc.com](http://www.canadianzinc.com).

All amendments to the Code and all waivers of the Code with respect to any of the officers covered by it will be posted on the Company's website within five business days of the amendment or waiver, and provided in print to any shareholder who requests them.

There have been no amendments, waivers or implicit waivers to the Code during the Company's fiscal year ended December 31, 2012. Shareholders may submit a request online at the Company's website [www.canadianzinc.com](http://www.canadianzinc.com) for a free printed copy of the Code.

## **MINE SAFETY DISCLOSURE**

Not applicable.

## **TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS**

The required tabular disclosure is included under the heading “Liquidity, Financial Condition and Capital Resources” in the Company’s MD&A for the fiscal year ended December 31, 2012, filed as Exhibit 99.3 to this Annual Report on Form 40-F and is incorporated herein by reference.

## **NOTICES PURSUANT TO REGULATION BTR**

There were no notices required by Rule 104 of Regulation BTR that the Company sent during the year ended December 31, 2012 concerning any equity security subject to a blackout period under Rule 101 of Regulation BTR.

## **UNDERTAKING**

The Company undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an Annual Report on Form 40-F arises; or transactions in said securities.

## **CONSENT TO SERVICE OF PROCESS**

The Company filed an Appointment of Agent for Service of Process on Form F-X with the SEC on March 19, 2012 in connection with the class of securities in relation to which the obligation to file this Annual Report on Form 40-F arises. Any change to the name or address of the Company’s agent for service shall be communicated promptly to the SEC by amendment to the Form F-X referencing the file number of the Company.

## **SIGNATURES**

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this Annual Report to be signed on its behalf by the undersigned, thereto duly authorized.

### **CANADIAN ZINC CORPORATION**

By: /s/ John F. Kearney  
Name: John F. Kearney  
Title: President and Chief Executive Officer

Date: March 19, 2013

## EXHIBIT INDEX

The following exhibits have been filed as part of this Annual Report on Form 40-F:

<b>Exhibit</b>	<b>Description</b>
<b>Annual Information</b>	
99.1.	Annual Information Form of the Company for the year ended December 31, 2012
99.2.	Audited financial statements of the Company and notes thereto for the years ended December 31, 2012 and 2011 together with the report of the auditors thereon
99.3.	Management's Discussion and Analysis for the year ended December 31, 2012
<b>Certifications</b>	
99.4.	Certificate of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.5.	Certificate of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.6.	Certificate of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.7.	Certificate of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
<b>Consents</b>	
99.8.	Consent of Ernst & Young LLP
99.9.	Consent of Alan B. Taylor
99.10.	Consent of J. Morton Shannon
99.11.	Consent of Dinara Nussipakynova
99.12.	Consent of AMC Mining Consultants (Canada) Ltd.
99.13.	Consent of J. Barrie Hancock
99.14.	Consent of Barrie Hancock & Associates Inc.
99.15.	Consent of Byard H. MacLean