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

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES
EXCHANGE ACT OF 1934**

For the month of May 2023

Commission File Number: **001-39989**

PYROGENESIS CANADA INC.
(Translation of registrant's name into English)

**1744, William St. Suite 200
Montreal, QC, H3J1R4
Canada**
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-F [] Form 40-F []

On May 19, 2023, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

EXHIBIT INDEX

Exhibit Number **Description**

[99.1](#) [Press Release dated May 19, 2023](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PYROGENESIS CANADA INC.

(Registrant)

Date: May 19, 2023

/s/ P. Peter Pascali

P. Peter Pascali
Chief Executive Officer

P. Peter Pascali Updates Early Warning Report

MONTRÉAL, May 19, 2023 (GLOBE NEWSWIRE) -- P. Peter Pascali, President and Chief Executive Officer of PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY) ("**PyroGenesis**"), a high-tech company that designs, develops, manufactures and commercializes plasma atomized metal powders, environmentally friendly plasma waste-to-energy systems and clean plasma torch products, has filed yesterday an updated early warning report with respect to his shareholdings in PyroGenesis in connection with his proposed disposition (the "**Proposed Disposition**") through the facilities of the Toronto Stock Exchange of up to 850,000 common shares of PyroGenesis ("**Common Shares**") held by Fiducie de Crédit Mellon Trust (the "**Trust**") under an automatic securities disposition plan ("**ASDP**"). A notice of intention to distribute securities (Form 45-102F1) was also filed by Mr. Pascali and is available under the SEDAR profile of PyroGenesis at www.sedar.com.

The ASDP will allow for an orderly disposition of a small portion of the Common Shares held or controlled by Mr. Pascali at prevailing market prices during the period from May 25, 2023 to June 16, 2023.

Sales under the ASDP will be effected by an independent securities broker in accordance with general trading parameters set out in the ASDP, and Mr. Pascali is not permitted to exercise any further discretion or influence over how dispositions will occur under the ASDP. Dispositions pursuant to the ASDP will be reported by Mr. Pascali on SEDI in accordance with applicable Canadian securities legislation.

On May 18, 2023, a total of 178,580,395 Common Shares were issued and outstanding. As of May 18, 2023, prior to any sales under the Proposed Disposition, Mr. Pascali (i) beneficially owned and controlled 66,642,941 Common Shares (representing 37.32% of the issued and outstanding Common Shares), (ii) controlled 5,636,000 Common Shares beneficially owned by 8339856 Canada Inc. (the "**Holdco**") (representing 3.16% of the issued and outstanding Common Shares), (iii) controlled 4,334,357 Common Shares beneficially owned by the Trust (representing 2.43% of the issued and outstanding Common Shares), and (iv) controlled 4,000,000 Common Shares beneficially owned by The 2% Solution Foundation (the "**Foundation**"). This represents, in aggregate (the "**Total Ownership**"), 80,613,298 Common Shares, or 45.14% of the issued and outstanding Common Shares.

Assuming the completion of the Proposed Disposition, 850,000 Common Shares, representing 0.48% of the issued and outstanding Common Shares, will be sold by the Trust, resulting in a Total Ownership of 79,763,298 Common Shares (representing 44.67% of the issued and outstanding Common Shares).

In addition, Mr. Pascali beneficially owns and controls options issued under PyroGenesis' share-based compensation plans (which include the Issuer's Option Plan and the Issuer's Long Term Incentive Plan) to acquire 4,270,000 Common Shares (of which 3,495,000 are currently vested (the "**Vested Options**") and, 150,000 will vest on June 2, 2023, 325,000 will vest on July 16, 2023, 150,000 will vest on June 2, 2024, and 150,000 will vest on June 2, 2025 (the unvested options, collectively, the "**Unvested Options**").

Assuming the exercise of all the Vested Options, an aggregate of 3,495,000 Common Shares would be issued, and the Total Ownership would increase to 84,108,298 Common Shares (or 83,258,298 Common Shares assuming the completion of the Proposed Disposition), or 46.19% (or 45.73% assuming the completion of the Proposed Disposition) of the issued and outstanding Common Shares (based on the number of Common Shares issued and outstanding as of the date hereof and after giving effect to the issuance of the 3,495,000 Common Shares issuable under such options). Of such Total Ownership of 84,108,298 Common Shares, (i) 70,137,941 Common Shares would be beneficially owned and controlled by Mr. Pascali, (ii) 5,636,000 Common Shares would be controlled by Mr. Pascali and beneficially owned by the Holdco, (iii) 4,334,357 Common Shares (or 3,484,357 Common Shares assuming the completion of the Proposed Disposition) would be controlled by Mr. Pascali and beneficially owned by the Trust, and (iv) 4,000,000 Common Shares would be controlled by Mr. Pascali and beneficially owned by the Foundation.

Assuming the exercise of the Vested Options and the Unvested Options, an aggregate of 4,270,000 Common Shares would be issued, and the Total Ownership would increase to 84,883,298 Common Shares, or 46.42% of the issued and outstanding Common Shares (based on the number of Common Shares issued and outstanding as of the date hereof and after giving effect to the issuance of the 4,270,000 Common Shares issuable under such options). Of such Total Ownership of 84,883,298 Common Shares, (i) 70,912,941 Common Shares would be beneficially owned and controlled by Mr. Pascali, (ii) 5,636,000 Common Shares would be controlled by Mr. Pascali and beneficially owned by the Holdco, (iii) 4,334,357 Common Shares (or 3,484,357 Common Shares assuming the completion of the Proposed Disposition) would be controlled by Mr. Pascali and beneficially owned by the Trust, and (iv) 4,000,000 Common Shares would be controlled by Mr. Pascali and beneficially owned by the Foundation.

The Trust, the Holdco and the Foundation may be considered to be joint actors with Mr. Pascali. Mr. Pascali is a (i) trustee, executive officer and beneficiary of the Trust, (ii) director, executive officer and the sole shareholder of the Holdco, and (iii) director of the Foundation.

Mr. Pascali and any joint actor may, from time to time, acquire or dispose of ownership or control or direction over some or all of the securities of PyroGenesis depending on a number of factors.

For further information, including regarding the early warning report, including a copy of same (which is available under PyroGenesis' SEDAR profile at www.sedar.com), please contact:

P. Peter Pascali, President and Chief Executive Officer of PyroGenesis, at 514-937-0002. The address of the head office of PyroGenesis is 1744 William Street, Suite 200, Montreal, Quebec, H3J 1R4.