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 October 2021

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 [X]

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): _____

Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

Exhibits

99.1 Form 45-102F1 - Notice of Intention to Distribute Securities under Section 2.8 of NI 45-102 Resale of Securities

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: October 5, 2021

/s/ P. Peter Pascali P. Peter Pascali Chief Executive Officer

Form 45-102F1

Notice of Intention to Distribute Securities under Section 2.8 of NI 45-102 Resale of Securities

Reporting issuer

1. Name of reporting issuer: PyroGenesis Canada Inc.

Selling security holder

- 2. Your name: P. Peter Pascali (the "Investor")
- 3. The offices or positions you hold in the reporting issuer: **President and CEO of the issuer**
- 4. Are you selling securities as a lender, pledgee, mortgagee or other encumbrancer? No
- 5. Number and class of securities of the reporting issuer you beneficially own:

As of October 4, 2021, the Investor: (i) beneficially owns and controls 64,742,941 common shares, (ii) controls 7,251,000 common shares beneficially owned by 8339856 Canada Inc. (an entity of which he is a director, executive officer and the sole shareholder), (iii) controls 9,878,057 common shares beneficially owned by Fiducie de Crédit Mellon Trust (a trust of which he is a trustee, executive officer and beneficiary), and (iv) controls 1,000,000 common shares beneficially owned by The 2% Solution Foundation (a registered charity of which he is a director).

Distribution

- 6. Number and class of securities you propose to sell: 800,000 common shares held by Fiducie de Crédit Mellon Trust.
- 7. Will you sell the securities privately or on an exchange or market? If on an exchange or market, provide the name. **The common shares** will be sold on the Toronto Stock Exchange.

Warning

It is an offence to submit information that, in a material respect and in light of the circumstances in which it is submitted, is misleading or untrue.

Certificate

I certify that

- (1) I have no knowledge of a material fact or material change with respect to the issuer of the securities that has not been generally disclosed; and
- (2) the information given in this form is true and complete.

Date: October 4, 2021

P. Peter Pascali Your name (Selling security holder) P. Peter Pascali Signed with ConsignO Cloud (2021/10/04) Verify with verifio.com or Adobe Reader.

Your signature (or if a company, the signature of your authorized signatory)