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**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 [  ]

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.

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On October 28, 2021, 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

<u>Exhibit Number</u>	<u>Description</u>
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<a href="#">99.1</a>	<a href="#">Press Release dated October 28, 2021</a>
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## 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 28, 2021

/s/ P. Peter Pascali

P. Peter Pascali  
Chief Executive Officer

## PyroGenesis Selected to Provide \$9.2 Million Land-Based System to Destroy PFAS; An Emerging Hazardous Waste Stream

### First Non-Military Land-Based Contract

MONTREAL, Oct. 28, 2021 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a high-tech company (hereinafter referred to as the "Company" or "PyroGenesis"), that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions to reduce greenhouse gases (GHG) and address environmental pollutants, is pleased to announce today that it has been selected to provide a \$9.2MM land-based system to destroy Perfluoroalkyl and Polyfluoroalkyl Substances ("PFAS"). The Client is a large operator of public water systems, whose name will remain confidential for competitive reasons.

PyroGenesis was recently informed that, after a competitive bidding process, it had been selected to provide its plasma based thermal process equipment in a two-phase project geared to providing a land-based system to destroy PFAS. The first phase is to provide pilot testing. The second phase is geared to a full fabrication, refurbishing and commissioning of a fully commercial land-based system. The time to completion is, from the signing of the contract, approximately 6 months for the pilot system with the timeframe for the full system to be determined based on Phase 1. Work will not begin until a definitive agreement is signed by both parties. PyroGenesis is currently pursuing two additional opportunities within the same State in the USA.

PFAS are man-made chemicals that have been widely used in consumer products in various industries, such as aerospace, automotive, construction, amongst others, for many decades. Products that may contain PFAS include nonstick cookware, stain resistant coatings used on carpets, upholstery, and other fabrics, water resistant clothing, cleaning products, personal care and cosmetics products and any other product that resist grease, water and oil<sup>1</sup>. Because of their widespread use and strong chemical bonds and properties, which account for their persistence in the environment, PFAS are proving to be persistent pollutants that affect humans and wildlife, as they are likely to be exposed to these chemicals by consuming contaminated water or food, using products made with PFAS, or breathing air containing PFAS.

It has been documented that PFAS are synthetic chemical compounds that are increasingly being considered as an emerging contaminant. The term "emerging contaminant" isn't defined in regulations but generally refers to pollutants for which there are concerns regarding public health effects and are either not regulated or only recently starting to be regulated. Considered harmful "forever chemicals", these substances have been in the proverbial hot seat of regulators around the world.<sup>3</sup> These substances are increasingly becoming a health concern worldwide as they were only recently designated emergent/hazardous substances. Studies have shown that PFAS exposure may interfere with the body's natural hormones; increase cholesterol levels; affect the immune system; and increase the risk of cancer<sup>4</sup>. In fact, a report from the Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey (NHANES) has indicated that PFAS are found in the blood of 97% of Americans<sup>5</sup>.

"PFAS are obviously a waste stream that has to be addressed, and in short order. As such, we are extremely proud to have been selected, in a highly competitive bidding process, to provide our proprietary plasma-based environmental solution to this significant problem facing the world," said Mr. P. Peter Pascali, CEO and Chair of PyroGenesis. "The significance of this announcement goes far beyond the announcement itself as it represents our first commercial land-based system sold outside of the military and has opened up a significant opportunity for our land-based offerings within this segment. Outside the needs of our current Client there are many companies facing the same challenge and we fully expect to be providing similar solutions to these entities as well."

### About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce greenhouse gases (GHG), and are economically attractive alternatives to conventional "dirty" processes. PyroGenesis has created proprietary, patented and advanced plasma technologies that are being vetted and adopted by multiple multibillion dollar industry leaders in four massive markets: iron ore pelletization, aluminum, waste management, and additive manufacturing. With a team of experienced engineers, scientists and technicians working out of its Montreal office, and its 3,800 m<sup>2</sup> and 2,940 m<sup>2</sup> manufacturing facilities, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. The operations are ISO 9001:2015 and AS9100D certified, having been ISO certified since 1997. For more information, please visit: [www.pyrogenesis.com](http://www.pyrogenesis.com).

*This press release contains certain forward-looking statements, including, without limitation, statements containing the words "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "in the process" and other similar expressions which constitute "forward- looking information" within the meaning of applicable securities laws. Forward-looking statements reflect the Corporation's current expectation and assumptions and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties including, but not limited to, our expectations regarding the acceptance of our products by the market, our strategy to develop new products and enhance the capabilities of existing products, our strategy with respect to research and development, the impact of competitive products and pricing, new product development, and uncertainties related to the regulatory approval process. Such statements reflect the current views of the Corporation with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Corporation's ongoing filings with the securities regulatory*

authorities, which filings can be found at [www.sedar.com](http://www.sedar.com), or at [www.sec.gov](http://www.sec.gov). Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Corporation undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws. Neither the Toronto Stock Exchange, its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) nor the NASDAQ Stock Market, LLC accepts responsibility for the adequacy or accuracy of this press release.

SOURCE PyroGenesis Canada Inc.

For further information please contact:

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RELATED LINK: <http://www.pyrogenesis.com/>

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/cfc85c9c-0c99-4dc2-b1ad-e1cc19177242>

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<sup>1</sup> <https://www.atsdr.cdc.gov/pfas/health-effects/exposure.html>

<sup>2</sup> Trends in the Regulation of Per- and Polyfluoroalkyl Substances (PFAS): A Scoping Review; Academic Editor: Paul B. Tchounwou; Int. J. Environ. Res. Public Health 2021, 18(20), 10900; Originally published by the Government Accountability Office in report GAO-21-37: ‘Man-Made Chemicals and Potential Health Risks, EPA Has Completed Some Regulatory-Related Actions for PFAS’.

<sup>3</sup> <https://www.enhesa.com/resources/article/emerging-contaminants-trends-in-pfas-regulation/>

<sup>4</sup> <https://www.atsdr.cdc.gov/pfas/activities/index.html>

<sup>5</sup> Lewis RC, Johns LE, Meeker JD. 2015. Serum Biomarkers of Exposure to Perfluoroalkyl Substances in Relation to Serum Testosterone and Measures of Thyroid Function among Adults and Adolescents from NHANES 2011–2012. Int J Environ Res Public Health. 12(6): 6098–6114

<https://www.niehs.nih.gov/health/topics/agents/pfc/index.cfm#footnote1>