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 September 2022

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.

On September 13, 2022, 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 September 13, 2022

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: September 13, 2022 /s/ P. Peter Pascali P. Peter Pascali

Chief Executive Officer

PyroGenesis Selected by Advanced Materials and Chemicals Trading House to Supply SPARCTM Land-Based Waste Destruction System

Project Will Deliver Complete, Carbon-Free Destruction of Ozone-Depleting Refrigerant Substances for Southern Hemisphere Facility

MONTREAL, Sept. 13, 2022 (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 which are geared to reduce greenhouse gases (GHG), is pleased to announce today that it has been chosen by an advanced materials and chemicals trading house in the Southern hemisphere (the "Client") to provide the Company's SPARCTM refrigerant waste destruction system. The Client's name will remain confidential for competitive reasons. The system is the first of two systems that the company has indicated they may require. With engineering services, ancillary equipment options, and after-sales support, the ultimate project cost will be between USD\$2-5MM per system depending on final decisions regarding full deliverables and the final agreement is expected to be signed before the end of Q2 2023.

"The SPARCTM technology is one of the Company's first major technology achievements, which I believe speaks to our foresight, and our continued R&D, that a legacy system such as this can be used to address recent trends we are all seeing, evidenced by the increased demand for environmentally-friendly waste destruction systems – especially those geared to the destruction of dangerous or polluting chemicals and gases," said Mr. P. Peter Pascali, CEO and Chair of PyroGenesis. "Jurisdictions worldwide are tightening regulations surrounding hazardous waste disposal, while at the same time trying to stimulate the safe destruction of hydrocarbons such as refrigerant chlorofluorocarbons (CFCs), by providing carbon credits to offset costs. This announcement today underscores the fact that companies are increasingly recognizing the major role that PyroGenesis' fossil-free waste destruction systems can play in this movement. Land-based systems such as our SPARCTM build upon the foundation of success we have established previously with our ship-board waste destruction systems for the U.S. Navy's Gerald R. Ford-class aircraft carriers."

As part of a greenfield project, where the Client has purchased land and are building a new facility, it is anticipated that PyroGenesis will be designing and building the SPARCTM refrigerant waste destruction system, while supervising and supporting contractors in the installation of the facility. The project has an approximate production-to-delivery timeline of 18 months from final contract signing.

The Client is a major supplier of chemicals and advanced materials throughout the Southern hemisphere. With a half-century of experience in logistics, storage, and handling of materials across a range of applications and industries, the Client – like PyroGenesis – maintains an ISO 9001 designation in support of its numerous global partnerships.

PyroGenesis' patented SPARCTM system is based on the technology platform originally developed by the Company for the U.S. Navy and a U.S. Air Force base. It uses inexpensive steam as the plasma-forming gas to generate a hydrolysis reaction which destroys refrigerants, leading directly to significantly reduced operating costs (versus more expensive gases) and cleaner operations with no incineration. Powered by electricity, use of the SPARCTM system substantially reduces carbon footprint, while eliminating ozone-depleting substances. It also destroys other chemicals such as CFCs, HCFCs, HFCs, Halons, and PFCs.

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 m2 and 2,940 m2 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.

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, or at 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.

For further information please contact: Rodayna Kafal, Vice President, IR/Comms. and Strategic BD Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com

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