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 [$\,$ X]

On May 18, 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 18, 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 18, 2023 /s/ P. Peter Pascali P. Peter Pascali Chief Executive Officer

PyroGenesis Announces Receipt of \$2MM Payment Under Existing Drosrite™ Contract

MONTREAL, May 18, 2023 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. ("PyroGenesis" or the "Company") (http://pyrogenesis.com) (NASDAQ: PYR) (TSX: PYR) (FRA: 8PY), a high-tech company that designs, develops, manufactures, and commercializes advanced plasma processes and sustainable solutions to reduce greenhouse gases, today announces that it has received a payment of US\$1.5 million (approximately CA\$2 million) under the Company's existing CA\$25+ million Drosrite™ contract. A balance of US\$8 million (approximately CA\$10.7 million) remains to be received under the contract.

As previously announced, PyroGenesis contracted with Drosrite International LLC, which was in turn contracted by Radian Oil and Gas Services Company for an order of 7 DrosriteTM systems. The first three systems have passed site acceptance testing and are currently in full commercial operation at the Ma'aden plant in Ras Al-Khair, which is a joint venture corporation with Alcoa. Ras Al-Khair is known to be the largest and most efficient vertically integrated aluminum complex in the world and boasts one of the world's largest smelters¹. The remaining four systems under the contract have already been manufactured and are ready for deployment subject to a renewed payment schedule.

"We trust that this payment will allay any concerns that some may have had with respect to the collectability of this receivable", said Mr. P. Peter Pascali, CEO and President of PyroGenesis. "The payment announced today was made in accordance with a continuously revised payment schedule geared to better align the pressures on the end-client's operating cash flows created by increased business opportunities. While there have been some delays, which were communicated to us in advance, the Company is in agreement with the general strategy being implemented by the client and its end-client. PyroGenesis believes that this relationship will lead to increased business opportunities as we cross sell our downstream and upstream business lines with this end-client and potentially with others in the region. Discussions in this regard have taken place, and continue to take place, with the client and the end-client. Although we anticipate receiving future payments based on the revised schedule being worked out, we recognize the possibility of future periodic payment delays due to unforeseen circumstances beyond our control. Nevertheless, based on the information we have, we view this project as a steppingstone to generating more business opportunities in the Middle East region."

PyroGenesis will provide updates on the revised payment schedule as they become available.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a proud leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce greenhouse gases, 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.

About Drosrite International LLC

Drosrite International (DI) is a US based private company duly constituted and existing under the laws of the State of Delaware, providing state-of-the-art waste management technologies to the aluminum industry. DI is duly licensed by PyroGenesis to manufacture, market, sell and distribute DROSRITETM systems and technology to the Kingdom of Saudi Arabia, and certain other countries in the Middle East, on an exclusive basis. All DROSRITETM systems supplied by DI are manufactured in the USA. DI is considered to be a separate entity from a legal standpoint, but is controlled by PyroGenesis for accounting purposes and as such is consolidated into PyroGenesis' financial statements. DI is owned and operated by Alex Pascali, the son of P. Peter Pascali, CEO and President of PyroGenesis.

About Radian Oil & Gas Services Company

Radian is a private Saudi Arabian company providing technologies that help customers conserve energy, operate more efficiently through a broad range of solutions while saving fuel, water / electricity & reducing CO2 emissions. Radian is owned by the HAKA Group, an established conglomerate business founded in 1967 which is also based in the Kingdom of Saudi Arabia. The group is operating in a diverse range of business sectors from logistics to food and drink and from construction to real estate, owning a flourishing mix of brands under its umbrella.

About Ma'aden

Ma'aden is a diversified multi-billion-dollar mining company, and was formed as a Saudi joint stock company in 1997. Since 2009, Alcoa, the world's eighth largest producer of aluminum, and Ma'aden have formed a joint venture that has created the world's largest, lowest cost, and fully integrated aluminum facility in Ras Al-Khair. Ma'aden is the largest mining company in the Kingdom of Saudi Arabia, and one of the world's most cutting-edge companies in their industry.

Cautionary and Forward-Looking Statements

This press release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking statements. Forward-looking statements are not historical facts, nor guarantees or assurances of future performance but instead represent management's current beliefs, expectations, estimates and projections regarding future events and operating performance.

Forward-looking statements are necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by the Company as of the date of this release, are subject to inherent uncertainties, risks and changes in circumstances that may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ, possibly materially, from those indicated by the forward-looking statements include, but are not limited to, the risk factors identified under "Risk Factors" in the Company's latest annual information form, and in other periodic filings that the Company has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under the Company's profile on SEDAR at www.sedar.com, or at www.sec.gov. These factors are not intended to represent a complete list of the factors that could affect the Company. However, such risk factors should be considered carefully. There can be no assurance that such estimates and assumptions will prove to be correct. You should not place undue reliance on forward-looking statements, which speak only as of the date of this release. The Company undertakes no obligation to publicly update or revise any forward-looking statement, 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.

Trademarks

The terms "PyroGenesis" and "DrosriteTM" are trademarks belonging to PyroGenesis may only be reproduced or otherwise used, except in accordance with PyroGenesis' applicable trademark use policies.

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

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

¹ https://www.bechtel.com/projects/ras-al-khair-aluminum-smelter/

[&]quot;Delivery of the largest greenfield aluminum smelter in the world"