

PyroGenesis Announces Completion of In-House Audit of Its NexGen™ Metal Powder Production Facility by Global Aerospace Company

PyroGenesis to Move to Final Sample Testing Phase Towards Product Qualification.

MONTREAL, Sept. 21, 2022 -- 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, high quality plasma atomized metal powder for 3D printing and additive manufacturing, and sustainable solutions which are geared to reduce greenhouse gases (GHG), is pleased to announce today that, further to its press releases dated [August 31, 2022](#) and [July 18, 2022](#), the in-person powder production audit at PyroGenesis' metal powder production facility in Montreal was completed by a tier one global aerospace company (the "Client").

"We are extremely pleased with the results of the on-site audit which offered us an opportunity to showcase our facility, our staff, and our groundbreaking process to a leading provider in design, engineering, and manufacturing of aircraft, aerospace technology, and defense solutions," said Mr. P. Peter Pascali, CEO and Chair of PyroGenesis. "The findings and recommendations suggested to us by the Client were thoughtful, valuable, and easily implemented. As you might expect the scrutiny was of the highest degree, and I wish to thank the entire team, who over many years, have contributed to this success. Once again, the philosophy that *"slow is smooth and smooth is fast"* is bearing fruit for both the Company and its investors."

As mentioned in prior news releases, this on-site facility and production audit is a significant step for the Company as part of the final phase of the Client's qualification process, which has spanned over 18 months of investigative rigor towards becoming an approved supplier of metal powders to the Client and its suppliers. With this step completed, the Company is making requested modifications and adjustments in order to proceed with delivery of final samples of titanium powder for chemical and mechanical testing by the Client.

"From the outset, we wanted to validate our product and our system with the best, under the hardest and the most difficult standards. We are proud to state that all of the Client's findings are addressable and aligned with our expectations prior to the audit," said Mr. Massimo Dattilo, VP, PyroGenesis Additive. "As we have stated in the past, given our unique manufacturing process that exponentially improves upon the world's leading existing metal powder production process – which we invented – using high temperature plasma atomization, we expect to be in a position to capture a significant share of the global titanium powder market. Completing the modifications by the Client's audit findings and moving to the final sample delivery stage with such a major global aerospace company is a huge step towards that goal. We continue to be on track for a Q4 2022 / Q1 2023 target for final submission and approval."

The goal of PyroGenesis' Additive division is to become a leading supplier of plasma atomized metal powders to end- users of additive manufacturing (AM) and 3D printing, which include, but are not limited to, the aerospace, biomedical, and automotive industries. The Company believes that its NexGen™ metal powder production system, a single-step process that is unique in that it uses wire as a direct feedstock, will produce significant gains in production speed, particle size control, and cost.

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

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