PYROGENESIS PROVIDES UPDATE ON ADDITIVE MANUFACTURING STRATEGY (ON SCHEDULE FOR Q1-2017 POWDER PRODUCTION);

FILES WORLD PATENT FOR IMPROVED POWDER PRODUCTION PROCESS

MONTREAL, QUEBEC--(Marketwired – October 25, 2016) - PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX-V: PYR) (OTCQB: PYRNF), a clean-tech company (the "Company" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma waste-to-energy systems and plasma torch products, provides herein a general update on its previously announced additive manufacturing strategy.

Mr. P. Peter Pascali, President and CEO of PyroGenesis, provides this update in the following Q&A format. The questions for the most part are derived from inquiries received from investors, analysts, and potential customers/partners:

Q. Is it correct to say that PyroGenesis can produce powders which can be used in the Additive Manufacturing industry, specifically in 3D printing? If so, can you please elaborate on why your powder is so unique?

A. Most certainly. PyroGenesis has developed, and patented, a plasma-based process, which we call the Plasma Atomization Process (hereinafter referred to as: "PAP"), that can transform wires into powder, specifically titanium wire into titanium powder. The powder produced by this unique method is not only very small, but very spherical and uniform. These three properties – small, spherical and uniform – enable the powder to flow like water and to compact tightly. PyroGenesis' powders are known to be some of the smallest, most spherical and most uniform powders in the world and are highly sought after in the Additive Manufacturing Industry, specifically in 3D printing.

Q. Is this a new business line for PyroGenesis?

A. One might say yes; however it is important to understand that we have done this before. PyroGenesis originally developed this process in the 1990's and, during 2001-2004, was selling titanium powders to the biomedical industry who liked their "flowability". These powders were used in injection molding to make biomedical implants, such as knee replacements. Despite the success, PyroGenesis got out of this business when it became apparent that the biomedical industry was only interested in a particular particle size and were not interested in purchasing all of PyroGenesis' production. Now the reason we decided to get back into the business was due to the increased demand we saw, and are now receiving, within the Additive Manufacturing industry for this exact type of powder.

All this to say, this is not an entirely new business line for PyroGenesis as we have done this before in a commercial environment: we have marketed the product; produced the product; sieved the product, and transported the product.

Q. Since 2001-2004, when you said you were selling these powders to the biomedical industry, have you made any improvements?

A. Most certainly. Last year alone, we invested approximately CAD 2MM into improvements in both production rate and particle size distribution. In other words, by increasing the amount of powder we can produce per hour, and the amount of powder that is within the "sweet spot" used in Additive Manufacturing. These improvements were in fact the very reason we decided to strategically move away from selling powder production systems and decide to enter into the powder producing market ourselves.

Q. Yes, that's true. Almost a year ago to the day, the Company announced that it was moving into producing specialty powder for the Additive Manufacturing industry. Where does this stand?

A. We are proud to say that we are on track to be producing powders in Q1-2017, as previously announced. We have most of the necessary equipment to assemble a PAP system, the balance of which is scheduled to be ordered shortly, all arriving in time to meet the expected Q1 production schedule.

The PAP system will produce highly spherical powder with a narrow particle size distribution (1µm to 106µm); all while retaining the purity requirements of the Additive Manufacturing industry.

Note, we will initially focus production on Titanium and its alloys, due to increased current customer demand, and more importantly, it being our expertise however we do have plans to adapt the PAP system to meet the demands of the Additive Manufacturing industry, specifially, as it moves towards other metals and composites so highly sought after in the Aerospace, Medical, Automotive, and Military industries. The depth of our plasma expertise here at PyroGenesis gives us a significant advantage in doing so.

Q. You also had a CAD 12.5MM contract to deliver ten (10) systems to an Asian client if I am not mistaken? I understand one (1) was delivered, and the balance was not. Can you elaborate?

A. Our intention was to fulfil the contract and deliver the balance of nine (9) systems however between finishing the first system and commencing fabrication of the other nine (9) systems, three (3) things happened. First, we spent approximately CAD 2MM to improve the first system's production rate and powder size. Second, and given these improvements, we previously announced on October 26, 2015, our strategic decision to move away from producing systems in favour of producing powders. Our internal calculations indicated that what we could

expect to make from the powders produced from one (1) system, year in/year out, outweighed that which we expected from the one-time profit made from selling ten (10) systems. Third, a situation arose that enabled us to withdraw the offer to produce the balance of nine (9) systems, which was most opportune since, as much as we would have liked to deliver the nine (9) systems, we were not set up to do both that and enter into powder production.

Q. This must have caused quite a bit of hardship?

A. It certainly did. What company with CAD 6MM in revenues and traditional margins of 40-50% would not suffer from getting out of a CAD 12.5MM contract? The decision was even more difficult given that several months earlier, we had stated that with the downpayment for the next nine (9) systems, the Company was projected to be cash flow positive.

Q. How did you make the decision?

A. It was not easy. There were many external factors that impacted the process; cash requirements, market sentiment, analyst projections, amongst others. Actually, an employee asked me that same question and I responded that, in order to understand what the best decision for the Company is, one must imagine that these external factors do not exist. In other words, what would you decide if you had all the cash you need, investor sentiments were nonexistent, and analysts would understand? Once you figure out what the best decision is, then you can decide whether these external factors are manageable, and that's exactly what we did. We decided that the gain derived from being in powder production sooner, far outweighed the short term pressures from not having the cash or credibility from producing the nine (9) systems.

Q. ...And?

A. And I think we were right. Our six (6) month performance was dismal to say the least; however we now have over CAD 11MM in signed contracts since June 30th, 2016; all of which are paying and cash flow positive, i.e. do not require financing. We believe those who understood the market, appreciated our decision.

Separately, the Additive Manufacturing industry is heating up and the recent announcement that General Electric ("GE") purchased two (2) of the world's top makers of powder machines for metal-based 3D printing - Sweden's "Arcam" and Germany's "SLM Solutions" - for a total CAD 1.4B, underscores that position. I think our investors are beginning to appreciate our decision to provide powders to the Additive Manufacturing industry when we did, as opposed to sitting on the sidelines during this exciting time.

Q. GE's acquisition of Arcam and SLM Solutions for CAD 1.4B is quite interesting on a number of fronts. Can we say there is a powder production element in this acquisition? Could you maybe elaborate on PyroGenesis' capabilities as it relates to this acquisition?

A. Yes of course. In 2014, Arcam acquired Montreal-based company AP&C, a division of Raymor Industries ("AP&C"), for CAD 35MM.[1] AP&C was producing powders using PyroGenesis' proprietary technology under an agreement which precluded PyroGenesis from competing with AP&C until 2012. Since then, PyroGenesis has vastly improved the technology, and such improvements remain the sole property of PyroGenesis.

Q. What does the GE's acquisition of Arcam, and by extension AP&C, mean to PyroGenesis? How do you expect it will impact the Company's strategy moving forward?

A. The acquisition of Arcam by GE underscores the importance and value that the powders produced using our PAP has within the Additive Manufacturing industry, and further validates our strategic decision to get back into powder production, which, in retrospect, was quite timely.

Also, since AP&C is the only company that had rights to PyroGenesis' old technology, this acquisition by GE has actually provided for an increased interest by others in the industry about our capabilities.

Q. On April 7th, 2016, PyroGenesis announced its intention to spin-off its Additive Manufacturing capabilities into an independent entity. Can you provide an update on the status of this?

A. As previously announced, it is indeed our intention to spin-off our Additive Manufacturing capabilities into an independent entity. At the time we press released our decision, the Company had a clear view of what we wanted to do and how we were going to go about doing it; however since such press release, we have received a number of unsolicited offers which has allowed us to revisit our strategy and look at things differently.

While doing so, GE announced the aforementioned CAD 1.4B acquisition, and as we noted, changed the landscape and has allowed for an increased interest in our intentions. All this to say that, our preferred strategy remains to spin-off our Additive Manufacturing capabilities into an independent entity; however these recent events, amongst others, have simply required us to reconsider the timing and method of doing so.

Q. On June 8th, 2015, the Company announced the filing of a provisional patent for an improved powder production process with higher production rates, and better distribution. Can you give us an indication of where this stands?

A. Certainly. As previously announced, PyroGenesis filed a provisional patent for its PAP. This new process enables PyroGenesis to produce metallic powders at higher production rates while, at the same time, allowing for better control of powder size distribution. The need to

[1] http://advancedpowders.com/news/arcam-to-make-strategic-acquisition-of-metal-powder-manufacturer-to-secure-supply-of-strategic-raw-materials/

produce powders of a specific particle size distribution at increasingly higher production rates is driven by the growing demand created by the Additive Manufacturing industry, particularly 3D printing.

Since then, in June of 2016, we have progressed to filing a worldwide patent for the PAP, and have recently filed an application for Taiwan; a country which is not part of the Patent Cooperation Treaty (PCT).

Q. *Conclusion?*

A. Additive Manufacturing is growing at an incredible pace. The growth will only accelerate as industry-wide standards are ratified. With this growth, many conglomerates, medium-sized companies, and start ups will expand their R&D and production methods to incorporate the advantages of Additive Manufacturing. All this bodes well for those that can produce powders, and can keep pace, as the requirements of Additive Manufacturing for new and improved powders grow.

As our patented process has proven its ability to provide unique powders to this growing industry, come Q1-2017, PyroGenesis will be in a position to produce powders on its own, as opposed to simply selling systems that do just that.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc. is the world leader in the design, development, manufacture and commercialization of advanced plasma processes. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 3,800 m^2 manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Our core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Our operations are ISO 9001:2008 certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace (Ticker Symbol: PYRNF). For more information, please visit www.pyrogenesis.com

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