October 3, 2023

ASP Isotopes Issues Letter to Shareholders

WASHINGTON, Oct. 03, 2023 (GLOBE NEWSWIRE) -- ASP Isotopes Inc. NASDAQ: ASPI ("ASPI," or the "Company"), an advanced materials company dedicated to the development of technology and processes designed to produce isotopes used in multiple industries, today released the following letter to shareholders from its Chairman and CEO, Paul Mann.

Dear Fellow Shareholder,

At the end of the 3rd quarter, I want to summarize the year-to-date progress and discuss our future goals. We have made significant progress during the first nine months of 2023, completing the construction of our first isotope enrichment plant and signing two supply contracts with North American customers for greater than $11.5 million in expected aggregate revenue for future supply of Carbon-14 and other highly enriched isotopes. In addition, we recently incorporated new subsidiaries in the United States and the United Kingdom to focus on producing HALEU and Lithium-6. These two isotopes are essential to meeting longer-term global climate goals.

ASPI core technology - now proven commercially viable and scalable.

Our accomplishments during the first nine months of 2023, outlined above, have the potential to generate a substantial amount of free cash flow for the company during 2024. The company plans to use that cash flow to start the construction of additional plants in 2024 for other isotopes. These additional plants will likely be in a new location outside South Africa, benefiting from more advantageous energy sources like Iceland. We are also in discussions with commercial partners in the industrial gases sector and quantum computing to build some of these additional manufacturing facilities now that our aerodynamic separation technology has been proven commercially viable and scalable. The business model under discussion is based on a joint venture structure whereby we would provide technology and expertise, and our commercial partner would provide investment capital and receive supply security at advantageous prices.

Creation of Quantum Leap Energy

Last week, we announced our strategy to enter the nuclear fuel market with the formation of new U.S. and U.K subsidiaries called Quantum Leap Energy ("**QLE**") and a Memorandum of Understanding with a leading global Small Modular Reactor ("**SMR**") Company. SMRs are widely viewed as the future of nuclear power, providing many substantial benefits over the nuclear power stations constructed in the past. Specifically, SMRs will be smaller-sized reactors, allowing greater deployment flexibility. They will be designed for production-line manufacturing, requiring limited on-site preparation to substantially reduce lengthy construction times and provide considerably lower construction costs. The simplicity of the

SMR design, combined with enhanced safety features, should mean that almost any citizen can have continuous access to environmentally friendly, zero-carbon energy at a cost comparable to or potentially lower than that provided by heavily polluting constant energy sources such as coal and oil.

QLE addresses the worldwide shortage of HALEU.

Most new SMRs require a new form of enriched uranium, called HALEU (High Assay Low Enriched Uranium), which is up to 19.75% in the U-235 isotope. Historically, nuclear reactors have used LEU (Low Enriched Uranium), which is typically enriched by up to 5%. Currently, there is no Western producer of HALEU, and the NEI (Nuclear Energy Institute) estimates that there will be a global demand of 3,000 metric tons by 2035. We are currently in discussions with multiple SMR companies requiring HALEU, and they have indicated a demand summating to approximately $30 billion based on current market prices.

QLE is expected to develop proprietary laser-based technology to achieve enrichment.

We expect to enrich uranium and lithium using our Quantum Enrichment Process, a proprietary technique developed by our scientists to enrich isotopes using lasers. We believe it is likely the most cost-effective method of enriching heavy isotopes, particularly those that do not lend themselves well to being converted into a stable gas. We believe that, with time, we can produce HALEU with a cost of production substantially below other enrichers.

Our technology partnered with customer capital may be a viable solution to the worldwide HALEU shortage.

Importantly for ASPI shareholders, our discussions with SMR companies assume that there will be significant financial support in the construction of HALEU production facilities. We expect that QLE will be the majority shareholder in these facilities but will be funded by a third-party, non-dilutive capital. The financial model is expected to be similar to our strategy that we are employing in non-nuclear isotopes (*i.e.*, a joint venture based on our technology coupled with partner capital). We also plan to work with existing nuclear facilities to navigate the complex regulatory framework and approval requirements.

ASPI and QLE are likely two separate companies.

It is currently anticipated that the Company will consider plans for a future spin-off of the QLE business to ASPI shareholders so that our shareholders will then benefit from ownership in two entities: ASP Isotopes Inc. and Quantum Leap Energy Inc – the first being focused on isotopes for medical and technology, quantum computing and non-nuclear energy technology (carbon-14, molybdenum-100, silicon-28, zinc-68) and the second focused on nuclear fuels for the future (HALEU and Lithium-6).

The rationale for this separation goes beyond the fact that each company will employ different enrichment technologies. The regulatory landscape and supply chain for nuclear fuel production differs significantly from that of medical isotopes; hence, ASPI and QLE will have different business models. Ultimately, QLE will be independently managed and financed by ASPI. As outlined above, we expect the majority of QLE's financial needs to be supplied by its customers, either as an investment into the new entity or as prepayments

against future shipments. We anticipate that as both entities develop, we will expand the senior management in both companies.

The market for isotopes is at an inflection point from both a demand and a supply perspective. We intend to position ASPI and QLE as a trusted supplier of existing isotope products and those of the future.

Isotopes have one of the most severely compromised supply chains of any material in the world. Currently, supply is almost totally controlled by Rosatom State Nuclear Energy Corporation, the Russian state-owned entity headquartered in Moscow, and a handful of state-owned or controlled enrichers. The United States Department of Energy (DOE) and every other Western government identifies isotopes as a critical material. Isotopes enable everyday activities such as nuclear imaging, are essential in the production of advanced electronics and semiconductors, and are required as fuels and coolants in nuclear power stations, which provide approximately 13% of electricity generated in the United States. Global industrial production, electricity generation, and Western defense capabilities remain susceptible to supply chain disruption from geopolitically adverse counterparties. This is why we are discussing our longer-term supply capabilities with so many companies and governments. We hope to sign more supply agreements for essential isotopes in the coming months.

If you want to learn more about our Company, please visit our corporate website and follow us on our social media channels.

Thank you for your interest and support.

With best wishes,

Paul E. Mann

Chairman and Chief Executive Officer

About ASP Isotopes Inc.

ASP is an advanced materials company dedicated to developing technology and processes to produce isotopes in multiple industries. The Company employs proprietary technology, the Aerodynamic Separation Process (“ASP technology”), for the production, distribution, marketing, and sale of all isotopes. The Company’s initial focus is on producing and commercializing highly enriched isotopes for the healthcare and technology industries. With time, it also plans to enrich isotopes for the green energy sector. The Company has two isotope enrichment facilities in Pretoria, South Africa. The first is a facility dedicated to the enrichment of isotopes of elements with a low atomic mass (light isotopes) and will initially produce Carbon-14. The ASP plans to use the second, larger facility for the production of multiple different isotopes.

There is a growing demand for isotopes such as Silicon-28, which will enable quantum computing, and Molybdenum-100, Molybdenum-98, Zinc-68, Ytterbium-176, and Nickel-64 for new, emerging healthcare applications, as well as Chlorine-37, Lithium-6, and Uranium-235 for green energy applications. The ASP Technology (Aerodynamic Separation Process) is ideal for enriching low and heavy atomic mass molecules. For more information, please

visit www.aspisotopes.com.

Forward-Looking Statements

This press release contains “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Forward-looking statements can be identified by words such as “believes,” “plans,” “anticipates,” “expects,” “estimates,” “projects,” “will,” “may,” “might” and words of a similar nature. Examples of forward-looking statements include, among others but are not limited to, statements we make regarding expected operating results, such as future revenues and prospects from the potential commercialization of isotopes, future performance under contracts, and our strategies for product development, engaging with potential customers, market position, and financial results. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict, many of which are outside our control. Our actual results, financial condition and events may differ materially from those indicated in the forward-looking statements based upon a number of factors. Forward-looking statements are not a guarantee of future performance or developments. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. Therefore, you should not rely on any of these forward-looking statements. There are many important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements, including: our reliance on the efforts of third parties; our ability to complete the proposed the construction and commissioning of our enrichment plant(s) or to commercialize isotopes using the ASP technology or the Quantum Enrichment Process; our ability to obtain regulatory approvals for the production and distribution of isotopes; the financial terms of any current and future commercial arrangements; our ability to complete certain transactions and realize anticipated benefits from acquisitions; contracts, dependence on our Intellectual Property (IP) rights, certain IP rights of third parties; and the competitive nature of our industry. Any forward-looking statement made by us in this press release is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise. This press release includes market and industry data and forecasts that we obtained from internal research, publicly available information and industry publications and surveys. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Unless otherwise noted, statements as to our potential market position relative to other companies are approximated and based on third-party data and internal analysis and estimates as of the date of this press release. We have not independently verified this information, and it could prove inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data-gathering process and other limitations and uncertainties. In addition, we do not know all of the assumptions regarding general economic conditions or growth that were used in preparing the information and forecasts from sources cited herein. No information in this press release should be

interpreted as an indication of future success, revenues, results of operation, or stock price. All forward-looking statements herein are qualified by reference to the cautionary statements set forth herein and should not be relied upon.

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