November 27, 2023

ASP Isotopes Inc. Enters Into Memorandum of Understanding (MOU) With Second US-based Small Modular Reactor (SMR) Company To Supply High Assay Low Enriched Uranium (HALEU)

-The MOU outlines terms for a proposed collaboration on the development of a facility for producing HALEU, a vital nuclear fuel of the future. This collaboration includes a plan for the SMR company to consider providing financial support for the development of a HALEU production facility.

-ASP Isotopes Inc. and its subsidiary, Quantum Leap Energy LLC (QLE), are in active discussions with various regulatory bodies and governments to determine the location for its first HALEU production facility. Their aim is to supply commercial quantities of HALEU for SMRs by 2027.

WASHINGTON, Nov. 27, 2023 (GLOBE NEWSWIRE) -- ASP Isotopes Inc. NASDAQ: ASPI ("ASP Isotopes" or the "Company"), an advanced materials company dedicated to the development of technology and processes for the production of isotopes for use in multiple industries, today announced that it has signed a memorandum of understanding with a second US-based SMR (Small Modular Reactor) company to establish a facility for producing High Assay Low Enriched Uranium (HALEU), a critical fuel for next-generation nuclear reactors. The Company has received interest from potential customers totalling over $30 billion[(1)] of HALEU demand at recent market prices.

The Quantum Enrichment process, an advanced isotope enrichment technique that is currently under development by ASP Isotopes and its subsidiary, Quantum Leap Energy LLC (QLE), is intended to revolutionize HALEU production. The laser-based enrichment method promises affordability, lower production costs, and efficient construction, positioning HALEU and nuclear power as a cost-effective alternative to traditional, carbon-intensive electricity production.

Management anticipates a future demand for HALEU for the new generation of HALEU-fuelled small modular reactors (SMRs) and advanced reactor designs that are now under development for commercial and government uses. Currently, there are no Western producers of HALEU in commercial quantities, and many SMR companies worldwide face substantial delays until this fuel supply issue is resolved. Demand is expected to grow, potentially exceeding the Nuclear Energy Institute estimates of 3,000 metric tons by 2035[(2)]. This supply is crucial for the operation of SMRs, which are the key to the future of nuclear reactors.

“Over the last several decades, the scientists now working at ASP Isotopes have developed some of the world’s most advanced isotope enrichment technologies. We look forward to leveraging these technologies to address one of the world’s most pressing supply chain challenges and contributing to global climate goals,” said Paul Mann, Chairman and CEO of ASPI and Chairman and CEO of QLE.

Quantum Leap Energy LLC plans to finance this project through a combination of customer pre-orders and partnerships, independently of ASPI’s primary financial structure.

About ASP Isotopes Inc.

ASP Isotopes Inc. is a pre-commercial stage advanced materials company dedicated to the development of technology and processes to produce isotopes for use in multiple industries. The Company employs proprietary technology, the Aerodynamic Separation Process (“ASP technology”). The Company’s initial focus is on producing and commercializing highly enriched isotopes for the healthcare and technology industries. The Company also plans to enrich isotopes for the nuclear energy sector using Quantum Enrichment technology that the Company is developing. The Company has isotope enrichment facilities in Pretoria, South Africa, dedicated to the enrichment of isotopes of elements with a low atomic mass (light 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, including, without limitation, statements relating to the development of new technology for the enrichment of nuclear isotopes, the funding of operations, and the commencement of supply of isotopes to customers. 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 construction and commissioning of our enrichment plants 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.

Contacts

Jason Assad– Investor relations
Email: Jassad@aspisotopes.com
Telephone: 561-709-3043

1. IEA. “Net Zero by 2050 – Analysis.” IEA, www.iea.org/reports/net-zero-by-2050.

2. RFERL “Russia’s Stranglehold on the World’s Nuclear Power cycle,” https://www.rferl.org/a/russia-nuclear-power-industry

Source: ASP Isotopes Inc.