May 19, 2025

ASP Isotopes Inc. enters into Definitive Agreements with TerraPower including Loan Agreement for Construction of a HALEU Production Facility and Supply Agreements for HALEU

- ***Loan Agreement with TerraPower provides a term loan subject to conditions to support construction of a new uranium enrichment facility at Pelindaba, South Africa.***

- ***Supply Agreement supports the supply of HALEU for the first fuel core for TerraPower's Natrium Plant in Wyoming and contemplates the supply of HALEU over a 10-year period.***

- ***The Parties have also agreed to explore opportunities for ASPI or its affiliates to work with TerraPower to develop uranium enrichment production facilities within the United States.***

WASHINGTON, May 19, 2025 (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 the Company and certain of its subsidiaries have entered into multiple definitive agreements with TerraPower, a US nuclear innovation company, related to financing support for the construction of a new uranium enrichment facility capable of producing High Assay Low-Enriched Uranium (HALEU); and the future supply of HALEU to TerraPower, as a customer.

Loan Agreement

The Loan Agreement provides conditional commitments from TerraPower to the Company through one of its wholly-owned U.S.-based subsidiaries ("Borrower") for a multiple advance term loan to partially finance a proposed new uranium enrichment facility at Pelindaba, South Africa, which is designed to produce commercial quantities of HALEU. The Company is also in discussions with a number of financial institutions to provide additional capital for the construction of this HALEU production facility, and all such additional funding for this facility is expected to be non-dilutive to ASPI shareholders and QLE convertible noteholders.

The Company intends to construct its initial HALEU production facility at Pelindaba, subject to the receipt of all required permits and licenses to begin enrichment of uranium in South Africa. Pelindaba is South Africa's main nuclear research center, the headquarters of Necsa

(South African Nuclear Energy Corporation) and is the home of the 20MW research nuclear reactor, SAFARI-1.

The new uranium enrichment facility is designed to produce HALEU with an annual output of approximately 15 MTU of HALEU. The facility is expected to commence initial production of HALEU in 2027, subject to the receipt of all required permits and licenses to begin enrichment of uranium in South Africa, and is anticipated to create hundreds of full-time operational jobs and support thousands of additional jobs across a nationwide manufacturing supply chain. Concurrently, the Company and TerraPower have entered into a mutual commitment to explore further opportunities to develop uranium enrichment production facilities in the United States.

HALEU Supply Agreements

In addition to a loan agreement, the Company and TerraPower have entered into two supply agreements for the HALEU expected to be produced at the Company's uranium enrichment facility.

The initial core supply agreement is intended to support the supply the required first fuel cores for the initial loading of TerraPower's Natrium project in Wyoming

The long-term supply agreement is a 10-year supply agreement of up to a total of 150 metric tons of HALEU, commencing in 2028 through end of 2037.

The Company has two proprietary enrichment technologies – the Aerodynamic Separation Process and the Quantum Enrichment Process. The Company believes that these enrichment technologies can be deployed in a new HALEU facility for considerably lower capital costs, and in much less time, compared to the construction of a uranium enrichment facility using other known methods.

"*Over the last several decades, the scientists at South Africa's leading Universities, and more recently at ASP Isotopes, have developed some of the world's most advanced isotope enrichment technologies. Nuclear fuel has one of the most severely compromised supply chains of any material in the world. The world is in urgent need of additional suppliers*. *Over the next several years our goal is to use our technologies to solve many of the supply challenges which currently exist,"* said Paul Mann, Chairman and CEO of ASP Isotopes, and Chairman and CEO of QLE. He continued "*Our commercial agreement with TerraPower will enable us to accelerate the construction of an advanced nuclear fuel facility. It will also mobilize hundreds of workers in local regions to build and operate the new enrichment plant and support thousands of direct and indirect jobs across a global manufacturing supply chain*."

About ASP Isotopes Inc.

ASP Isotopes Inc. is a development 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 for enabling quantum computing; Molybdenum-100, Molybdenum-98, Zinc-68, Ytterbium-176, and Nickel-64 for new, emerging healthcare applications, as well as Chlorine-37, Lithium-6, Lithium-7 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, but can also be otherwise disclosed. Examples of forward-looking statements include, among others but are not limited to, the future of the company's enrichment technologies as applied to uranium enrichment, the outcome of the company's initiative to commence enrichment of uranium in South Africa and the company's discussions with nuclear regulators, the outcome of the project contemplated by the MOU with Necsa, the expected value of our HALEU supply agreements and the outcome of the transaction contemplated by the definitive agreements with TerraPower, potential receipt of additional funding and effects on shareholder dilution, the plans for a secondary listing on the JSE, the commencement of supply of isotopes to customers, the construction of additional enrichment facilities, and 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 the outcomes of various strategies and projects undertaken by the Company; the potential impact of laws or government regulations or policies in South Africa, the United Kingdom or elsewhere; 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; the competitive nature of our industry; and the factors disclosed in Part I, Item 1A. “Risk Factors” of the company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2024 and any amendments thereto and in the company’s subsequent reports and filings with the U.S. Securities and Exchange Commission. 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. 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

Source: ASP Isotopes Inc.