

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **August 15, 2025**

ASP Isotopes Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)	001-41555 (Commission File Number)	87-2618235 (IRS Employer Identification No.)
601 Pennsylvania Avenue NW South Building, Suite 900 Washington, DC (Address of principal executive offices)		20004 (Zip Code)

Registrant's telephone number, including area code: **(202) 756-2245**

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01	ASPI	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Item 8.01. Other Events.

On August 15, 2025, ASP Isotopes Inc. (the “Company”) issued a press release announcing the Company and its subsidiary, Quantum Leap Energy LLC, have entered into a Memorandum of Understanding with Fermi America regarding a U.S. joint venture to collaborate on the research, development and construction of an advanced nuclear fuel research and production facility at the planned 11GW HyperGrid Campus in Carson County, Texas. A copy of the press release is attached to this Current Report on Form 8-K as Exhibit 99.1 and is incorporated herein by reference, other than the sixth, seventh and eighth paragraphs of the press release.

Item 9.01. Financial Statements and Exhibits.

Exhibit No.	Description
99.1	Press Release, dated August 15, 2025, of ASP Isotopes Inc. announcing a Memorandum of Understanding with Fermi America regarding a U.S. joint venture to collaborate on the research, development and construction of an advanced nuclear fuel research and production facility at the planned 11GW HyperGrid Campus in Carson County, Texas
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ASP ISOTOPES INC.

Date: August 15, 2025

By: /s/ Donald G. Ainscow

Name: Donald G. Ainscow

Title: Executive Vice President,
General Counsel and Secretary



ASP Isotopes Inc. and its Subsidiary, Quantum Leap Energy LLC, enter into a Memorandum of Understanding with Fermi America Regarding a Joint Venture to Collaborate on the Research, Development and Construction of an Advanced Nuclear Fuel Research and Production Facility at the Planned 11GW HyperGrid Campus in Carson County, Texas

- Fermi America is a private U.S. developer of the planned HyperGrid campus near Amarillo, Texas, which is leased from Texas Tech University and is expected to be the world's largest hybrid energy and data infrastructure campus providing 11GW of power.

- Fermi America was co-founded by Rick Perry, the former U.S. Energy Secretary and former Texas Governor.

- MOU contemplates the formation of a joint venture between Quantum Leap Energy LLC ("QLE") and Fermi America for the development of a HALEU enrichment research and commercial production facility (the "TX JV HALEU Project").

- In addition, the MOU also contemplates a lease at the planned HyperGrid campus for ASP Isotopes Inc. ("ASPI") to construct a commercial production facility for stable isotopes and advanced materials (excluding advanced nuclear fuels) (the "ASPI TX Project"), such as radiopharmaceuticals, electronic gases, and other critical materials that will enable global megatrends of the future, such as quantum computing and nuclear medicine.

- Fermi America is expected to be responsible for obtaining all licenses, permits, governmental and regulatory approvals, and other required consents for the JV HALEU Project.

- The property leased by Fermi America from the Texas Tech University System for the HyperGrid Project lies adjacent to the DOE-operated Pantex Plant, offering unique proximity to a federally hardened and environmentally characterized site. The site is pre-qualified for nuclear deployment under DOE and NRC precedent studies and is governed by sovereign institutional control held by the Texas Tech University System, as lessor. It is contemplated in the MOU that both the TX JV HALEU Project and the ASPI TX Project will be constructed at, and will operate from, the HyperGrid Project in Amarillo, Texas.

WASHINGTON, D.C., DALLAS, TEXAS, August 15th, 2025 (GLOBE NEWSWIRE) -- ASP Isotopes Inc. NASDAQ: ASPI ("ASPI" 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 its subsidiary, Quantum Leap Energy LLC ("QLE" or "Quantum Leap Energy"), an advanced materials company focused on the development of technology and processes for the production of advanced nuclear fuels, have entered into a Joint Venture Memorandum of Understanding (MOU) with Fermi LLC ("Fermi America"), regarding a joint venture pursuant to which the parties intend to collaborate on the research, development and ultimately the commercial production of advanced nuclear fuels on the planned HyperGrid Campus in Carson County, Texas.

The non-binding MOU contemplates QLE and Fermi America entering into definitive agreements pursuant to which the parties will form a new entity in Texas as a joint venture for the research and development, and then the construction, of an advanced nuclear fuel enrichment facility capable of producing large quantities of High Assay Low Enriched Uranium (HALEU) for small modular reactors. It is anticipated that the advanced nuclear fuel facility will provide for the conversion and deconversion of uranium products, as well as the fabrication of fuel assemblies. In addition, the MOU contemplates ASPI entering into a separate lease for the development and construction of a 100% ASPI-owned enrichment research and commercial production facility for stable isotopes and advanced materials (excluding advanced nuclear fuels), which may include critical materials, such as Silicon-28, Germanium-70, Ytterbium-176, Nickel-64, Xenon-129, Zinc-68 and Chlorine-37.

The property leased by Fermi America from the Texas Tech University System for the HyperGrid Campus is strategically located near the DOE-operated Pantex Plant near Amarillo, Texas, offering unique proximity to a federally hardened and environmentally characterized site. The site is pre-qualified for nuclear deployment under DOE and NRC precedent studies and is governed by sovereign institutional control held by Texas Tech University, as lessor. The HyperGrid Campus is expected to be the world's largest hybrid energy and data infrastructure campus and is anticipated to generate over 11 GW of electricity to supply data centers, as well as other industries. Pantex is the primary United States nuclear weapons assembly and disassembly facility that aims to maintain the safety, security and reliability of the U.S. nuclear weapons stockpile and is home to the site where most U.S. nuclear weapons are constructed and assembled.

Fermi America, co-founded by former U.S. Energy Secretary and former Texas Governor Rick Perry, along with Former Quantum Private Equity Co-Founder, Toby Neugebauer, aims to meet the rapidly growing energy demands tied to AI infrastructure. Fermi America has submitted its Combined Operating License Application to build four Westinghouse AP1000 reactors as part of its HyperGrid Project. Fermi America plans to begin construction on the nuclear power complex in 2027 and aims to have the first reactor operational by 2032. Fermi America has also entered into an MOU with Hyundai E&C for the construction and engineering of Nuclear Reactors on the HyperGrid site.

The Joint Venture MOU by and among ASPI, QLE and Fermi America was signed at a signing ceremony that took place in Dallas, Texas on August 14, 2025 and was attended by representatives of all parties, including Mr. Paul Mann, Chairman and CEO of ASPI, Dr. Ryno Pretorius, CEO of Quantum Leap Energy, and Mr. Toby Neugebauer, CEO of Fermi America.

Toby Neugebauer, Co-Founder of Fermi America, said, *“Over the last three decades, our country has been asleep at the wheel, forcing reliance on foreign nations for critical technology materials such as next-generation semiconductors and nuclear energy. Fermi is determined to restore America as global leaders in the nuclear space, and our partnership with ASP Isotopes and Quantum Leap Energy is the natural next step”.*

Paul Mann, Chairman and CEO of ASP Isotopes and Chairman of Quantum Leap Energy, said *“During the last three years, ASP Isotopes has constructed three isotope enrichment facilities in South Africa to produce isotopes to enable faster semiconductors and next-generation cancer therapies. As a U.S. company, our goal has always been to bring these technologies to the United States to ensure that the United States has a domestic supply of these materials and reduce its reliance on imports from other countries. We are excited to enter into this joint venture with Fermi America to accelerate this goal.”*

Ryno Pretorius, CEO of Quantum Leap Energy, commented that *“QLE is excited to enter the United States domestic production market as a provider of Nuclear Fuel Services to meet the rapidly growing demands of the Fermi America HyperGrid project, as well as existing and future partners in the United States. Our goal is to scale our technologies as quickly as possible to reduce the bottleneck on the nuclear fuel industry and unlock clean American nuclear energy that will provide consistent, base load power, not only for AI but millions of Americans. We believe Fermi America is another key strategic partner to help us develop and scale our nuclear fuel services and solutions in the United States with an initial base in Texas.”*

During the next 30 years, global energy consumption will likely double⁽¹⁾. The advanced nuclear fuels required during the next 50 years are expected to differ significantly from those used in the last 50 years. AI demand requires high base load energy which will be partially supplied by large growth in the nuclear industry from Small Modular Reactors. Many small modular and advanced reactors in the future are expected to require HALEU. The Company has received interest from potential customers who collectively require over \$37 billion of HALEU between the present day and 2037, at current market prices.

ASPI has previously announced that it has entered into two supply agreements with TerraPower, LLC for HALEU from an initial uranium facility they expect to construct at Pelindaba in South Africa. The initial core supply agreement is intended to support the supply of the required first fuel cores for the initial loading of TerraPower's Natrium project in Wyoming during the 2027/28 timeframe. 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 construction of an advanced nuclear fuel facility in Texas, USA would become the second facility owned or co-owned by QLE for the production of HALEU. ASPI and QLE are also in discussions with the UK government regarding the construction of an advanced nuclear fuel facility in the UK. ASPI has also previously announced its intention to spin out QLE as a separate public company listed on the NASDAQ stock exchange in 4Q25.

The signing of the Joint Venture MOU with Fermi America was facilitated by Ocean Wall Limited, who acted as adviser to both ASP Isotopes and Fermi America in establishing this strategic partnership.

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.

About Fermi America.

Fermi America™ is pioneering the development of next-generation electric grids that deliver highly redundant power at gigawatt scale, required to create next-generation artificial intelligence. Co-founded by former U.S. Energy Secretary Rick Perry, Fermi combines cutting-edge technology with a deep bench of proven world-class multi-disciplinary leaders to create the world's largest, next-gen private grid. The behind-the-meter campus is expected to integrate the largest nuclear power complex in America, the nation's biggest combined-cycle natural gas project, utility grid power, solar power, and battery energy storage, to deliver hyperscaler artificial intelligence. Fermi America, LLC is a limited liability company organized under the laws of the State of Texas.

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 relating to the formation of a joint venture with Fermi America, the commencement of research, development and production activities in the United States, 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 in South Africa and the UK, the outcome of the project contemplated with Necsa, the expected need or desire for HALEU by third parties, the outcome of the transactions contemplated by the definitive agreements with TerraPower, commencement of supply of isotopes to customers and the application of new technology for the enrichment of isotopes, the planned construction of additional isotope 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 failure to obtain necessary regulatory approvals for the proposed acquisition of Renergen; disruption from the proposed acquisition of Renergen making it more difficult to maintain business and operational relationships; significant transaction costs and unknown liabilities related to the proposed acquisition of Renergen; litigation or regulatory actions related to the proposed acquisition of Renergen; 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 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, investments, collaborations and contracts; dependence on our Intellectual Property (IP) rights and 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 (ASP)

Email: Jassad@aspisotopes.com

Telephone: 561-709-3043

Lexi Swearingen–Media relations (Fermi America)

Email: Media@FermiAmerica.com