

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): **October 30, 2024**

**ASP Isotopes Inc.**

(Exact name of registrant as specified in its charter)

<b>Delaware</b> (State or other jurisdiction of incorporation)	<b>001-41555</b> (Commission File Number)	<b>87-2618235</b> (IRS Employer Identification No.)
<b>601 Pennsylvania Avenue NW, South Building, Suite 900 Washington, DC</b> (Address of principal executive offices)		<b>20004</b> (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	Ticker symbol(s)	Name of each exchange on which registered
<b>Common Stock, par value \$0.01</b>	<b>ASPI</b>	<b>The Nasdaq Stock Market LLC</b>

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 October 30, 2024, ASP Isotopes Inc. (the “Company”) issued a press release announcing that the Company has entered into a term sheet with TerraPower, LLC related to the construction of a HALEU production facility. 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 paragraph of the press release.

**Item 9.01. Financial Statements and Exhibits.**

<b>Exhibit No.</b>	<b>Description</b>
<a href="#">99.1</a>	<a href="#">Press Release, dated October 30, 2024, of ASP Isotopes Inc. announcing a term sheet with TerraPower, LLC related to the construction of a HALEU production facility.</a>
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: October 30, 2024

By: /s/ Paul Mann  
Name: Paul Mann  
Title: Chief Executive Officer

October 30, 2024

**ASP Isotopes Inc. enters into Term Sheet with TerraPower, LLC for Construction of a HALEU Production Facility**

*- Term sheet contemplates preparation of definitive documentation pursuant to which TerraPower would provide funding for the construction of a uranium enrichment facility and would purchase HALEU after the expected completion of the facility.*

WASHINGTON, Oct. 30, 2024 (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 entered into a term sheet with TerraPower, a nuclear innovation company and advanced nuclear energy developer, related to the construction of a uranium enrichment facility capable of producing High Assay Low-Enriched Uranium (HALEU) and the future supply of HALEU to TerraPower, as a customer of Quantum Leap Energy LLC (QLE).

The term sheet contemplates the preparation of definitive agreements pursuant to which TerraPower would provide funding for the construction of a HALEU production facility. In addition, the parties anticipate entering into a long-term supply agreement for the HALEU expected to be produced at this facility pursuant to which the customer would purchase all the HALEU produced at the facility over a 10-year period after the expected completion of the facility. It is anticipated that the definitive agreements will be assigned to ASP Isotopes' wholly owned subsidiary, Quantum Leap Energy LLC (QLE). The term sheet contains non-binding and binding provisions, including a period of exclusivity during which ASP Isotopes will not negotiate with third parties for the supply of HALEU or work on another ASP technology-based uranium enrichment facility.

The Company is also in discussions with certain financial institutions to provide additional capital for this HALEU production facility, and all funding for this facility is expected to be non-dilutive to ASPI shareholders and QLE convertible noteholders.

During the next 30 years, global energy consumption will likely double<sup>(1)</sup>. To meet 2050 climate goals, this must occur with a zero increase in carbon emissions. The advanced nuclear fuels required during the next 50 years are expected to differ significantly from those used in the last 50 years. Specifically, many small modular and advanced reactors in the future are expected to require HALEU.

The Company believes that its 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 an enrichment facility using a traditional centrifuge process of HALEU production. The Company has already constructed or is in the process of constructing three isotope enrichment facilities in South Africa. The first facility is expected to enrich Carbon-14 for use in healthcare and agrochemicals. The second facility is expected to enrich Silicon-28, which the Company believes will enable faster, more efficient semiconductors for use in artificial intelligence and quantum computing. The third facility is expected to enrich Ytterbium-176, a critically important raw material used in the production of oncology therapies.

*“Over the last several decades, the scientists at ASP Isotopes have developed some of the world’s most advanced isotope enrichment technologies. This term sheet is further validation of our belief that ASP Isotopes can offer scalable and capital efficient technology solutions to the supply challenges which exist in global isotope markets”* said Paul Mann, Chairman and CEO of ASP Isotopes, and Chairman and CEO of QLE.

**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](http://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 expectation of entering into definitive agreements contemplated by the term sheet with AMR companies and the final terms thereof, the expected value of our HALEU supply agreement, the development of new technology for the enrichment of nuclear isotopes and other industrial isotopes, the competition from alternative technologies, the impact of ongoing economic uncertainty and geopolitical tensions and risks on global supply chains, the market demand for enriched uranium, the commencement of supply of isotopes to customers, and the construction of additional enrichment facilities. 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 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; 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](mailto:Jassad@aspisotopes.com)  
Telephone: 561-709-3043

1. IEA. “Net Zero by 2050 – Analysis.” IEA, [www.iea.org/reports/net-zero-by-2050](http://www.iea.org/reports/net-zero-by-2050).