

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): September 2, 2025

ASP Isotopes Inc.

(Exact name of registrant as specified in its charter)

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
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 7.01. Regulation FD Disclosure.

On September 2, 2025, ASP Isotopes Inc. (the “Company”) issued a letter to shareholders. 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.

The information in this Item 7.01, including Exhibit 99.1, shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liability of that section, and shall not be incorporated by reference into any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

Exhibit No.	Description
99.1	ASP Isotopes Inc. Letter to Shareholders, dated September 2, 2025.
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: September 2, 2025

By: /s/ Donald G. Ainscow

Name: Donald G. Ainscow

Title: Executive Vice President,
General Counsel and Secretary



ASP Isotopes Issues Letter to Shareholders

Washington, D.C., September 2, 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 released the following letter to shareholders from its Chairman and CEO, Paul Mann.

Dear Fellow Shareholder,

The past few months have been exciting and highly rewarding as the Company has brought three isotope enrichment facilities into operation.

I am delighted to report that the Company has now shipped the first samples of both Ytterbium-176 and Silicon-28 to customers, a major milestone for the Company that should allow us to fulfil indicated customer demand representing \$50 to \$70 million of potential revenues during 2026 and 2027 from these two isotopes alone.

In addition, the Company has started the procurement process for long lead time equipment to deliver four new laser production plants, which we plan to construct, starting in the first quarter of 2026.

After four years of hard work, the Company is now transitioning from primarily a research and development company to a commercial organization and the goal of the Company during the next five years is to accelerate the industrialization of the processes that we have created and maximize production volumes and revenues.

Working with partners such as NECSA, TerraPower and Fermi America, the Company is well positioned to be a major beneficiary of tomorrow's megatrends across energy, medicine and next-generation industrial processes.

Three isotope enrichment facilities are now operational with Ytterbium-176 and Silicon-28 samples sent to customers.

Researching, constructing and commissioning three plants in three years is a noteworthy achievement and we are very proud of our progress.

We successfully shipped samples of both Silicon-28 and Ytterbium-176 to customers during August, in line with the guidance that we provided in July. We also expect to ship the first samples of Carbon-12 to a customer during September.

The shipping of the first enriched isotopes marks an important milestone. These last four years have been focused on research and development of new processes that will scale into a large commercial organization.

These first enrichment facilities will act as a blueprint in the future where we will implement process efficiencies learnt during the construction of these first of a kind facilities to further improve timelines and capital expenditure.

We have already commenced the procurement process of critical long lead-time components for four new laser plants, which will be used to enrich Gadolinium-160, Zinc-68, Nickel-64 and Lithium-6/7, isotopes where we have received significant customer interest.

Quantum Leap Energy (“QLE”) targeting a public listing in Q4 2025 and has started the procurement for its first enrichment facility.

In May 2025 we hired Dr. Ryno Pretorius to become the CEO of Quantum Leap Energy. His focus has been to accelerate development and he is in the process of expanding the senior leadership team and expediting the permitting and licensing process of nuclear fuel plants in three jurisdictions.

There is a considerable amount of customer demand for HALEU, as well as Lithium-6 and Lithium-7. We expect to have the first Lithium-6 plant operational during 2026, subject to the timely receipt of all required permits and licenses. Our goal is to have a HALEU production facility operational during 2027, subject to the receipt of all required permits and licenses.

We intend to start construction of critical materials plants in USA during 2026 following the signing of an MOU with Fermi America.

The recent Joint Venture MOU with Fermi America contemplates a transformative step for the Company, with both ASPI and QLE expected to lease space for facilities at the planned HyperGrid Campus in Amarillo, Texas, a strategically pre-qualified nuclear site located adjacent to the DOE’s Pantex Plant. This planned collaboration with Fermi America envisages the research, development and construction of multiple large-scale advanced nuclear fuel enrichment facilities, capable of producing significant volumes of HALEU for the small modular reactor industry.

ASP Isotopes also expects to develop a standalone enrichment and production facility for a suite of critical stable isotopes, such as Silicon-28, Germanium-70, and Xenon-129. With Fermi America’s ambitious plans to deliver over 11 GW with 6 GW of nuclear generation to power AI infrastructure and data centres, QLE is positioned as a future supplier of critical fuel and an enabler of the world’s most advanced energy and data ecosystems. This convergence of regulatory progress, industrial partnerships, and robust market demand positions QLE to be part of the global nuclear renaissance.

PET Labs continues to make continued progress and is on track to dispense a record number of doses in 2025.

PET Labs continues to deliver outstanding progress with its second cyclotron operational as of July following an 18-month commissioning phase. With its current cyclotron already operating at peak utilisation, frequently completing four production runs nightly, the business is meeting record demand. Last week, PET Labs became authorized and able to dispense SPECT radioisotopes (in addition to PET radioisotopes) and this will likely drive a strong uptick in deliveries during 4Q 2025. We are proud that PET Labs provides all treatments to children under 18 entirely free of charge, ensuring no child is denied access to critical care due to family financial constraints. This initiative has generated immense goodwill in South Africa and strengthened the Company's relationship with the government, enhancing its position as it pursues further growth opportunities both organically and through acquisitions.

Our relationship with IsoBio is expected to be transformational for the Company. IsoBio, backed by PET Labs and ASP Isotopes, is building a best-in-class pipeline of radiotherapeutics targeting difficult-to-treat tumours using Lutetium-177, Actinium-225, Terbium-161 and other cutting-edge radioisotopes. By integrating IsoBio's proprietary antibody isotope conjugate platform with PET Labs' secure isotope supply chain, the group mitigates one of the largest risks facing radiotherapy developers and positions itself with a unique competitive advantage. Led by seasoned biotech executive Dr Bruce Turner and supported by world class oncology and nuclear medicine experts, IsoBio is poised to advance highly differentiated therapies into the clinic, while PET Labs progresses its own biotech assets towards human trials in 2026. Together these initiatives create a compelling global growth story in precision oncology.

Renegen merger on track for a 3Q 2025 close

We have now received all but one of the regulatory approvals we require to close the Renegen merger, and we continue to expect the merger to close during 3Q 2025. The combination of these two highly complementary businesses aims to create a global leader in the production of critical and strategically important materials, including electronic gases such as helium, various fluorinated products and isotopically enriched gases. The combination is expected to create a vertically and horizontally integrated supply chain with significant geographic and customer overlap with substantial synergies expected from 2026.

In 2025 the world helium markets saw upward pressure on pricing, with some minor supply chain disruptions and increased demand in the electronics sector. We are seeing a new geopolitical trend with nations pushing to establish dominance and independence with respect to semiconductor manufacturing. This is particularly true for the US, China, Japan, Taiwan and South Korea. Initiatives such as the US CHIPS Act onshoring fabrication, and China pushing towards onshoring chips away from Taiwanese imports, the increased demand for raw materials to feed these new installations is likely going to have a medium to long term impact.

In anticipation of the proposed merger, the Renergen team have been supported by the ASPI team, including process engineering and upstream development expertise. Renergen has engaged Kinley Exploration to conduct all seismic activity and guidance on drilling and the group now has seven active drilling units on site. Enabled by our bridge loan to Renergen and acceleration of the project, we now expect Renergen to deliver at least \$20 million in revenues during 2026 and be cash flow positive. The transaction is expected to be highly accretive to ASPI's revenue, EBITDA, earnings per share and cash flow per share during 2026.

Longer term expectations

The goal of the combined group is to generate over \$300 million in EBITDA in 2030, which is expected to be driven by a mix of isotopes, helium and LNG sales into the South African energy market, based on management's current estimates, expectations and assumptions regarding the execution on ASP Isotopes's and Renergen's businesses strategies. During November we will likely host an analyst event where we will provide a path to this EBITDA target. As investors, you will then be able to track our progress against this path to more accurately model how we expect the Company's financial results to develop during the next several years.

On August 27, 2025 ASPI Listed on the Johannesburg Stock Exchange.

On August 27, 2025, we listed our securities on the Main Board of the Johannesburg Stock Exchange under the abbreviated name "ASPI", share code "ISO" and international securities identification number US00218A1051. ASPI's history and technology is firmly rooted in South Africa and has been developed over four years by the Company's highly skilled South African team members.

ASPI believes that admission to trading of its shares on the JSE will be beneficial to the Company and its stakeholders as it will enhance liquidity for shareholders, diversify the Company's shareholder base and position ASPI for growth, by providing access to another deep capital market. The Company expects strong interest and support for a JSE listing from South African institutional investors.

The Company intends to acquire Renegen via a scheme of arrangement with the goal of creating a global critical materials company. Renegen Shareholders approved the resolution relating to the approval of the Scheme (with a 99.8% majority) at the Renegen general meeting held on July 10, 2025. Because the Company has not raised any capital with this listing, until such time as the Scheme is implemented, the Company expects trading in its shares on the JSE to be limited.

We have expanded our management team

When we incorporated the Company in September, 2021, there were just two employees. Now we have over 170 employees with over 20% having a PhD and 50% having an advanced degree.

Over the past 18 months, ASP Isotopes has significantly broadened and strengthened its management team, particularly at the senior level.

Strengthening the C-Suite

- **Heather Kiessling (Group CFO, July 2024):** With 30 years of CFO experience across healthcare companies—from start-ups to market leaders—Heather brings deep financial and operational expertise.
- **Donald Ainscow (General Counsel, August 2025):** Donald was appointed as the Company's first General Counsel in August 2025. Donald brings 20 years of experience at global law firms Norton Rose Fulbright and DLA Piper, and, most recently, Blank Rome. His extensive background in corporate law, transactions, and securities regulation adds strong in-house legal capability to the business.
- **André Visser (General Counsel (South Africa) September 2025):** André Visser has been appointed as General Counsel, South Africa. André has over 30 years of corporate and commercial experience advising local and international clients across a range of sectors with a strong focus on intellectual property matters. He has previously worked at the law firms DLA Piper, Adams & Adams and Norton Rose.

Broadening the Wider Management Team

- **Bill Eden, MBE (Director of UK Nuclear Operations & Global Head of HR, November 2024):** Also a Cambridge Natural Sciences graduate, Bill previously served in HM Forces, including strategic planning roles in the UK Army and liaison responsibilities in Washington DC with the US Army. He brings both operational leadership and human capital management experience.
- **Viktor Petkov (Chief Commercial Officer, March 2024):** Viktor focuses on driving the commercial strategy for the Medical and Semiconductor isotope business, leveraging his background at top-tier investment banks and early-stage companies. His expertise in debt structuring, securitization, and customer engagement strengthens the company's growth and funding strategy across Europe and North America.
- **Tim de Souza-Ingle (Head of Business Development, March 2025):** A Cambridge graduate, Tim works alongside Dr. Kemp to drive PET Lab expansion across Europe and the US. With experience in consultancy, strategy, business development, and government advisory, he combines commercial acumen with regulatory expertise across multiple jurisdictions.

Preparing QLE for Public Listing

In parallel, significant focus has been placed on building a highly capable scientific and management team to lead QLE into its public listing.

Leadership Transition: Earlier this year, Paul Mann announced that he has handed over the CEO role to Dr. Ryno Pretorius, while remaining as Chairman of QLE.

Dr. Ryno Pretorius (CEO, May 2025): A graduate in chemical engineering from Pretoria University, specialising in fluorochemical engineering, Dr. Pretorius has over 15 years' experience in technology scale-up. His career includes four years at Necsa (South African Nuclear Energy Company) in Pelindaba, where he developed a deep understanding of the nuclear fuel supply chain and fluorination's role in nuclear fuel production. For the past decade, he has served as Technical Director and CEO of Free Radical Process Design, a global consultancy in engineering technology development and evaluation. There, he led teams of engineers and chemists in solving complex technical challenges for clients worldwide. Importantly, Free Radical Process Design has been one of ASP Isotopes' key consultants in tackling engineering challenges linked to isotope enrichment facilities.

Finance Leadership: The Company recently hired a CFO for QLE who is set to commence on October 1, 2025, to further strengthen the team ahead of the IPO. This individual has over 30 years of experience in accounting and public company reporting. We will announce his name during September when his current clients have been informed.

The expansion of the senior teams at both **ASP Isotopes** and **Quantum Leap Energy** reflects a deliberate strategy to equip the businesses with the depth of expertise needed to execute on ambitious growth plans. At ASP Isotopes, the strengthening of the C-suite and wider management team brings operational, legal, financial, and commercial firepower to support international expansion. At QLE, the appointment of Dr. Ryno Pretorius as CEO, alongside an imminent CFO hire, ensures world-class scientific and financial leadership as the company prepares for its IPO.

Together, these developments underscore a clear commitment to building resilient, high-calibre organizations that are positioned to scale rapidly, deliver on their technological edge, and create long-term shareholder value.

Investor Relations/Communications - Institutional Ownership now over 70%

ASP Isotopes values transparency and open communication with all stakeholders and counterparties and we regularly host investors and other stakeholders at its facilities most recently in the week of 25th August. We have now hosted five investor access events over the last 18 months.

Over 100 institutional investors have now visited our facilities in South Africa.

Our next investor access event will be in Pretoria on 12th and 13th November 2025, with a second trip to follow around Indaba Feb 2026. Investors wishing to join should contact Viktor Petkov on vpetkov@aspisotopes.com to reserve a place.

Quarterly Reporting: As part of our expansion of Investor Relations and Communications, we will now be doing quarterly online presentations and Q&A sessions to go through numbers and updates for investors. The first of these will be in November. Full access details will be released on our website nearer to the date.

Bloomberg now shows that 74.3% of the Company are owned by institutional investors plus insiders.

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

Thank you for your continued interest and support.



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 the commencement of supply of isotopes to customers, the construction of additional enrichment facilities, the completion of the Renegen acquisition and other transactions in the anticipated timeframe or at all, the plans for a spin-out of Quantum Leap Energy as a standalone public company, 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, but not limited to: 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 future capital requirements and sources and uses of cash; our ability to obtain funding for our operations and future growth; our reliance on the efforts of third parties; our ability to complete the proposed 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; the competitive nature of our industry; risks related to: (i) the implementation of the scheme of arrangement for the proposed Renergen acquisition in the anticipated timeframe or at all, (ii) the satisfaction of the scheme conditions, (iii) the failure to obtain necessary regulatory approvals and third party consents, (iv) the ability to realize the anticipated benefits of the proposed acquisition of Renergen, (v) the ability to successfully integrate the businesses; (vi) disruption from the proposed acquisition of Renergen making it more difficult to maintain business and operational relationships, (vii) the negative effects of the consummation of the proposed acquisition of Renergen on the market price of Renergen's or ASPI's securities, (viii) significant transaction costs and unknown liabilities, and (ix) litigation or regulatory actions related to the proposed acquisition of Renergen; and the factors disclosed in Part I, Item 1A. "Risk Factors" of the company's Annual Report on Form 10-K. 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.

Use of Projections

The financial outlook and projections, estimates and targets in this press release are forward-looking statements that are based on assumptions that are inherently subject to significant uncertainty and contingencies, many of which are beyond ASP Isotopes's or Renergen's control. Such calculation cannot be predicted with reasonable certainty and without unreasonable effort because of the timing, magnitude and variables associated with the completion of the proposed transaction with Renergen. Additionally, any such calculation, at this time, would imply a degree of precision that could be confusing or misleading to investors. Neither ASP Isotopes nor Renergen's independent auditors have audited, reviewed, compiled or performed any procedures with respect to the financial projections for purposes of inclusion in this press release, and, accordingly, they did not express an opinion or provide any other form of assurance with respect thereto for the purposes of this press release. While all financial projections, estimates and targets are necessarily speculative, ASP Isotopes believes that the preparation of prospective financial information involves increasingly higher levels of uncertainty the further out the projection, estimate or target extends from the date of preparation. The assumptions and estimates underlying the projected, expected or target results for ASP Isotopes, Renergen and the combined company are inherently uncertain and are subject to a wide variety of significant business, economic and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the financial projections, estimates and targets. The inclusion of financial projections, estimates and targets in this press release should not be regarded as an indication that ASP Isotopes, or its representatives, considered or consider the financial projections, estimates or targets to be a reliable prediction of future events. Further, inclusion of the prospective financial information in this press release should not be regarded as a representation by any person that the results contained in the prospective financial information will be achieved.

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