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 19, 2023

ASP ISOTOPES INC.

(Exact name of registrant as specified in its charter)

Delaware	001-41555	87-2618235
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer dentification No.)
1101 Pennsylvania Avenue NW, Sui Washington, DC	te 300	20004
(Address of principal executive offi	ces)	(Zip Code)
Registrar	t's telephone number, including area code: (202) 756	-2245
(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 1	4d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
□ Pre-commencement communications pursuant to Rule 1	3e-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
Common Stock, par value \$0.01	ASPI	The Nasdaq Stock Market LLC
Indicate by check mark whether the registrant is an emerging g the Securities Exchange Act of 1934 (§240.12b-2 of this chapte		ies Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of

Emerging growth company \boxtimes

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 \Box

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

As disclosed in the prospectus for its initial public offering, ASP Isotopes Inc. (the "Company") intended to rely on a phase-in period under Nasdaq rules with respect to the composition of the board of directors applicable to newly public companies, which permits fewer than a majority of a listed company's board of directors to be independent on the listing date of its common stock, provided the listed company satisfies such requirement within one year of the date of listing. Accordingly, the Company intended to have a majority of its board of directors consist of independent directors within one year of the date its common stock was listed on The Nasdaq Capital Market. As a result of the resignation of Sergey Vasnetsov from the Company's board of directors and the appointment of Professor Mike Gorley to the Company's board of directors, as described below, a majority of the Company's board of directors is now comprised of "independent directors" and the Company is in compliance with Nasdaq Listing Rule 5605(b)(1) prior to the first anniversary of the date of listing on Nasdaq.

On October 19, 2023, Sergey Vasnetsov provided notice to the Company of his decision to voluntarily step down from the Company's board of directors, effective October 23, 2023. Mr. Vasnetsov's resignation was not the result of any disagreement with the Company. Mr. Vasnetsov is presently a consultant of the Company, and will continue to serve in this position.

Further, on October 23, 2023, the Board appointed Professor Mike Gorley to serve as a director of the Company, effective immediately following Mr. Vasnetsov's resignation. In doing so, the Board affirmatively determined that Prof. Gorley is an "independent director" within the meaning of the applicable Nasdaq listing standards. Prof. Gorley will serve as a Class II director whose term will expire at the Company's 2024 annual meeting of stockholders. The Board also appointed Prof. Gorley to serve as a member of the Nominating and Corporate Governance Committee of the Board. There is no arrangement or understanding between Prof. Gorley and any other person pursuant to which he was selected as a director of the Company, and there is no family relationship between Prof. Gorley and any of the Company's other directors or executive officers. The Company is not aware of any transaction involving Prof. Gorley requiring disclosure under Item 404(a) of Regulation S-K. Additional information about Prof. Gorley is set forth below.

Professor Michael Gorley, Ph.D., age 36, has served as Chief Technologist at the UK Atomic Energy Authority (UKAEA) since September 2020. In this role, for the past three years Prof. Gorley has served as a strategic leader and program area manager for fusion technology at UKAEA. Prior to assuming his current role at UKAEA, Prof. Gorley was Materials Technology Group Leader from August 2018 to September 2020 and Materials Technology Programme Manager from June 2016 to August 2018. In these roles, Prof. Gorley directed the establishment of the Materials Technology Group and supporting Materials Testing Laboratories, and led the EUROfusion Engineering Data and Design Integration group. In addition, Prof. Gorley has been a visiting professor at the University of Bristol, U.K. since June 2021. Prof. Gorley received a Ph.D. (DPhil) in Materials Science from Oxford University, U.K., with a thesis on ODS steels (specialized alloys for high-performance applications). The Company's board of directors believes that Prof. Gorley's significant expertise in fusion technology and fusion materials contributes to the Board's understanding and ability to analyze and navigate complex regulatory and business issues.

The Company entered into a letter agreement with Prof. Gorley regarding the terms of his service as a director, a form of which was filed as Exhibit 10.5 to the Company's Form 10-K filed on March 31, 2023. Under the agreement with Prof. Gorley, he will be entitled to receive a fee for his service as a member of the board of directors of \$60,000 per year, payable at the director's discretion in cash or common stock at market value. The fee will be paid quarterly in arrears (\$15,000 quarterly instalments) on the last business day of each December, March, June and September during the director's term. In addition, the Company agreed to award a common stock award with a market value of \$100,000 on October 23, 2023 and annually each year thereafter during the director's term. Prof. Gorley will also be eligible for reimbursement of all reasonable out-of-pocket expenses incurred by the Director in attending any in-person meetings. Prof. Gorley has also entered into the Company's standard form of indemnification agreement.

Item 9.01 Financial Statements and Exhibits.

2

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 23, 2023

By: /s/ Paul Mann

Name: Paul Mann Title: Chief Executive Officer