



ASP Isotopes Inc. Recognizes the Current Mo-99 Shortages and Continues to Execute on Plans to Help Ease Supply Chain Issues before 2024

ASP Isotopes Inc. NASDAQ: ASPI ("ASPI", the "Company", "us", "we" or "our"), an advanced materials company dedicated to the development of technology and processes designed to produce isotopes used in multiple industries, today confirmed that we remain on track to achieve our planned production of commercial quantities of highly enriched Molybdenum-100 before 2024. The Company plans to offer highly enriched Mo-100 to be used in the production of either technetium-99m (Tc-99m) or Mo-99 in a cyclotron or in a linear accelerator. Mo-99 is the active ingredient for Tc-99m-based radiopharmaceuticals used in nuclear medicine procedures to diagnose heart disease and cancer, to study organ structure and function, and to perform other important medical applications.

On November 17, 2022, the U.S. Food and Drug Administration (FDA) placed Tc-99m Sodium Pertechnetate generators on the Drug Shortages List. The Company has previously recognized the Mo-99 supply chain challenges in the existing medical isotope market. Currently, several overseas reactors that produce Mo-99, which is used to produce Tc-99m, are offline. The Mo-99 supply chain has historically been fragile and remains so today. The Company also understands that several ex-US consumers of Mo-99 are currently without supply, due to these supply issues. More information regarding the availability of Tc-99m generators is available on the FDA Drug Shortages List (<https://www.accessdata.fda.gov/scripts/drugshortages/default.cfm>).

The Company's molybdenum enrichment facility, currently under construction in Pretoria, South Africa is designed to have capacity to produce greater than 20 Kg/ year of molybdenum enriched to >95% in the Mo-100 isotope. The Company continues to expect that this facility will enter commercial production before 2024. The Company is in commercial discussions with multiple potential customers in multiple regions, with anticipated demands that currently exceed four times the headline capacity of the plant during the first five years of proposed production. The Company plans to expand capacity to meet the demands of these potential customers and update investors with the actual production capacity of the

facility during 1H 2023 when the plant is expected to enter the commissioning phase.

About ASP Isotopes Inc.

ASP is an advanced materials company dedicated to the development of technology and processes designed to produce isotopes used in multiple industries. We have an exclusive license to use proprietary technology, the Aerodynamic Separation Process ("ASP technology") for the production, distribution, marketing and sale of all isotopes.

Our initial focus is on the production and commercialization of enriched Molybdenum-100 ("Mo-100"), and we are constructing a first commercial-scale Mo-100 enrichment plant located in South Africa. We believe that the Mo-100 we may develop using the ASP technology has significant potential advantages for use in the preparation of nuclear imaging agents by radiopharmacies and others in the medical industry.

We may also seek to use the ASP technology to separate Silicon-28, which we believe has potential application in the quantum computing target end market, and Carbon-14, which we believe has potential application in the pharma/agrochemical target end market. In addition, we are considering future development of the ASP technology for the separation of Zinc-68, Ytterbium-176, Zinc-67, Nickel-64 and Xenon-136 for potential use in the healthcare target end market, and Uranium-235, Chlorine -37 and Lithium-6 for potential use in the nuclear energy target end market.

We were incorporated in Delaware in September 2021. Our principal executive offices are located at 433 Plaza Real, Suite 275, Boca Raton, Florida 33432, and our telephone number is (561) 709-3034. Our website address is www.aspisotopes.com.

Forward Looking Statements

This press release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, Section 21E of the U.S. Securities Exchange Act of 1934, as amended and the Securities Litigation Reform Act of 1995. The Company may also make written or oral "forward-looking statements" in documents filed with the U.S. Securities and Exchange Commission, in press releases, in reports to stockholders and in other materials or communications describing the Company. These "forward-looking statements" involve a number of risks, uncertainties, assumptions and other factors, many of which are outside of the Company's control, that could cause actual results to differ materially from such statements. For a more detailed description of these risks, uncertainties, assumptions and other factors, please see the Company's filings with the Securities and Exchange Commission, (and in particular the "Business", "Risk Factors" and "Management's Discussion and

Analysis of Financial Condition and Results of Operations" sections in the Company's SEC filings). Readers are cautioned not to put undue reliance on any forward-looking statements. Forward-looking statements speak only as of the date they are made, and we have no intention and undertake no obligation to update or revise any of them in light of new information, future events or otherwise. Copies of these documents are available on the SEC's website, www.sec.gov. The Company undertakes no obligation to update these statements for revisions or changes after the date of this release, except as required by law.

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