March 13, 2023

ASP Isotopes Announces Letter to Stockholders

BOCA RATON, FL / ACCESSWIRE / March 13, 2023 /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 announced a letter to stockholders from Chairman and CEO Paul Mann.

Dear Stockholders,

It is now almost 18 months since we founded ASP Isotopes, and I wanted to take this opportunity to provide an update on recent achievements and future goals, share some perspectives on the state of the global industry and, finally, remind everyone of the reasons we entered this industry. The most important news for investors (and primarily the reason for this update) is that our first isotope enrichment facility commenced operations this week -a major milestone in our company's short history.

Major Milestones:

- Successfully acquired two incomplete ASP plants in Pretoria, South Africa, and obtained the required licenses from the nuclear regulators, including the Non-proliferation Council of South Africa, to complete construction of the plants and produce commercial product.
- Successful completion and cold commissioning of the first manufacturing plant, capable of enriching light isotopes.
- Entered into a Memorandum of Understanding (MOU) with a North American customer for the entire offtake of the Company's first light isotope plant.
- Continued construction of the second isotope enrichment facility, including procurement of all major long lead items.
- Entered into a 25-year supply agreement for up to $27m per annum of highly enriched Molybdenum-100 with BRICEM (Beijing Research Institute of Chemical Engineering Metallurgy).
- Completion of initial public offering on NASDAQ.

We are proud of what we have accomplished over the last 18 months; however, we are just getting started, and we are highly excited by the opportunities ahead.

Our key goals for the remainder of 2023 include:

- Completion of our second, larger isotope enrichment facility, which is capable of enriching kilogram quantities of various isotopes.
- Entering into additional customer contracts for the remaining capacity of this second facility.

- Starting commercial production and commercial supply of at least two isotopes
- Securing the required permits for the construction of additional plants during the 2024 to 2027 timeframe. We believe this next location will benefit from renewable energy, which is typically very cost-advantaged vs. any global alternative for a long-period supply contract.

Since the founding of ASP Isotopes, the world has changed dramatically, and the need for new isotope enrichers has never been greater. The existing supply chain for established isotopes has always been fragile, and historically, Russia and China have been the largest providers of enriched isotopes. Given the current geopolitical events, many countries and companies are re-evaluating the identity, ownership and location of their suppliers. These supply-side shocks are occurring at a time when the need for new isotope products has never been greater, and the range of previously unrecognized applications is rising rapidly, all directly or indirectly linked to changing approaches to energy and security.

New isotope production will only enable many of the emerging global megatrends such as advanced healthcare, quantum computing, new small, safe nuclear reactors and green nuclear fusion involving Hydrogen. Currently, there are few or no suppliers for many of these highly specialized isotopes! We believe our technology has the potential to produce many of these, and we have never felt more optimistic regarding both our near-term outlook and our longer-term role in this rapidly developing industry.

The Major News in this Shareholder Newsletter - Our First Enrichment Facility is Now Operational:

Last week we completed the construction of our first manufacturing plant, which is located in Pretoria, South Africa. The Company's first facility is currently operating and enriching isotopes in line with management's expectations based on prior extensive R&D experiments conducted by ASPI and mathematical models. The Company previously entered into an MOU with a North American customer for the entire production of its new facility.

After the facility's initial processing of material to obtain the desired performance output, management expects the facility to generate initial revenues and cash flow during the latter part of 2023. This facility is designed for the enrichment of isotopes with low molecular masses. Management believes that the plant has the capability to enrich products such as Silicon-28, Carbon-13 and Carbon-14, and Oxygen-18.

Continued Progress on our Second Enrichment Plant, A Large-Scale Multi-Isotope Facility:

We continue to make progress on the construction of our second facility, also located in Pretoria, South Africa. This is a substantially larger facility, capable of enriching kilogram-quantities of highly enriched isotopes every year. Our goal is to have this plant also enter the commissioning and production phase during 2023. This plant has high flexibility for a wide range of isotopes, and we are currently in discussions with potential customers for commercial quantities of enriched molybdenum and silicon.

In November 2022, we signed a 25-year supply agreement with BRICEM (Beijing Research Institute of Chemical Engineering Metallurgy) for commercial quantities of highly enriched molybdenum-100 valued at up to $27 million in revenues per annum. China currently

imports approximately $94 million of Molybdenum-99, and, on our estimates, much of this can be replaced with Molybdenum-100.

We are currently in discussions with a number of other countries and companies regarding potential supply agreements.

Macro Backdrop - More Isotopes are Likely to be Required to Enable the Global Mega-Trends of Tomorrow:

Many emerging global megatrends in new healthcare technologies and advanced quantum computing innovations require a large and reliable supply of specialty isotopes.

In addition, it is widely recognized that new suppliers of isotopes will be required for the supply of green energy so that the world can meet longer-term carbon climate goals. We are in dialogue with all the large-scale companies and governmental institutions involved in delivering these global mega-trends.

We are in discussions with potential customers interested in new isotope suppliers and where we believe our technology can be used to perform enrichment efficiently:

- **Molybdenum-100:** An emerging product used in healthcare as a replacement for Molybdenum-99, the most used imaging radionuclide. Nine of the ten reactors producing Mo-99 are expected to shut down during the next 10 years. Currently, Russia is the only producer of Mo-100 on a commercial scale, and customers are looking for a new supplier.
- **Silicon-28:** Quantum computers are expected to be 1,000x times more powerful than today's conventional computers and create opportunities in medicine, artificial intelligence, cybersecurity, finance, logistics and other industries. Quantum computers will require ultra-pure Si-28, which is currently not available on a commercial scale at any price.
- **Zinc-68:** An emerging isotope used in radio medicine to produce Copper 67, which is becoming a widely used oncology treatment, and Gallium 68, which is used as a radiopharma tracer during PET (positron emission tomography) scans.
- **Ytterbium 176:** Yb-176 is emerging as a superior method of producing Lutetium-177, which is an eagerly-anticipated emerging therapeutic.
- **Chlorine-37:** Molten Salt Reactors (MSRs) are nuclear reactors that use a fluid fuel in the form of very hot fluoride or chloride salt. Only 6 companies are developing molten salt reactors. The design uses liquid chloride salts as the coolant and fuel that flows through the reactor core-allowing the fission to heat the salts directly. There is currently no commercial supplier of chlorine-37; we are in discussions with the manufacturers.
- **Lithium-6:** There is an emerging need for lower enriched levels of Lithium-6 for nuclear fusion, which is a promising energy source being developed in both the United States and Europe. Currently, there is no commercial producer of lithium-6 outside of Russia and China.
- **HALEU:** The critical component of the new generation of small, safe modular nuclear reactors that have been classified as green energy technology. A very public debate is raging about where the critical HALEU (High-Assay Low-Enriched Uranium) will be sourced from by the governments investing billions of pounds, dollars and euros sponsoring companies to manufacture the reactors. The ASP Process has its genesis

in the enrichment of Uranium, and we are very confident that we will be able to prove commercial efficacy once we have determined the regulatory and geographical structure that makes the development of this key isotope most efficient and valuable for the company.

A Reminder of How it all Started…:

The most common question I get asked, as the CEO of ASP Isotopes, is how we got involved in this business.

In 2020 we identified a group of scientists working on isotope separation technologies for healthcare applications. The scientists had originally worked on South Africa's nuclear program during the 1980s and collectively had decades of experience. When the political regime changed in 1994, the scientists started to develop methods of isotope enrichment for peaceful, non-nuclear applications. Over the next 20 years, they were able to develop the ASP Process (Aerodynamic Separation Process), which is a unique process especially capable of enriching light isotopes.

Given our backgrounds and extensive experience investing in both the healthcare industry and the chemicals processing industry, we immediately recognized the potential value of the technology. We were able to acquire the assets, and we raised sufficient capital that would allow us to advance the construction of the facilities. Then just 14 months after incorporation, we listed our shares on NASDAQ. And importantly, just 17 months from incorporation, we have commenced operations at our first isotope enrichment production facility.

And a Look to the Future…

The ASP technology is unique compared to many other methods currently used for isotope enrichment. The plants we can construct using ASP technology are small, modular and extremely flexible. This allows us to construct plants quickly and efficiently with a relatively small amount of capital. The modular nature means that small facilities can be expanded quickly and efficiently as demand grows. The low capital cost should allow us to achieve a very high return on capital. In addition, the ASP technology is capable of enriching light isotopes that cannot be enriched using other centrifugal methods, and we view this as extremely important given the likely future need for low-mass isotopes such as silicon-28, chlorine-37, deuterium and lithium-6.

The original investment was underwritten by the founders and founding investors supported just by a single manufacturing plant for a single isotope in Pretoria, South Africa. Obviously, geopolitical events have subsequently unfolded that have increased our opportunity set exponentially. Historically, Russia has been the largest supplier of isotopes to the Western world, and many governments and companies are currently assessing who their suppliers of critical materials are. Based on the number of conversations we are having with many potential customers, it is becoming evident that we will have to expand our production capacity during the 2024-2027 timeframe. During the next 12 months, we expect to announce the location of this future manufacturing site which we expect to benefit from extremely cheap renewable energy. This should allow us to become the lowest-cost producer of any isotope in a geopolitically favored location.

Hopefully, you are as excited as we are about the scale and the commercial opportunities

ahead, where our technology can deliver unique products to the world.

With best wishes,

Paul Mann - Chairman and CEO

About ASP Isotopes Inc.

ASPI 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 Carbon-14, Silicon-28 and Molybdenum-100 ("Mo-100"), and we are constructing two commercial scale isotope enrichment plants in Pretoria, South Africa. We believe Silicon-28 has the potential use in advanced semiconductors and the quantum computing end markets, and Carbon-14, which has potential application in the pharma/agrochemical target end market. We believe that the Mo-100 we plan to develop using the our technology has significant potential advantages for use in the preparation of nuclear imaging agents by radiopharmacies and others in the medical industry.

In addition, we are considering future development of its facilities 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 are 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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