### ASP ISOTOPES INC.

# CHARTER OF THE COMPENSATION COMMITTEE OF THE BOARD OF DIRECTORS

(As amended through December 9, 2024)

### I. STATEMENT OF POLICY

This Charter specifies the authority and scope of the responsibilities of the Compensation Committee (the "Committee") of the Board of Directors (the "Board") of ASP Isotopes Inc. (the "Company") and the manner in which those responsibilities shall be performed, including the Committee's structure, processes and membership requirements.

The Committee has the responsibility and authority to supervise and review the affairs of the Company as they relate to the compensation and benefits of executive officers and directors of the Company. In carrying out these responsibilities, the Committee shall review all components of executive officer and director compensation for consistency with the Company's compensation philosophy, as in effect from time to time, and with the interests of the Company's shareholders.

# II. ORGANIZATION AND MEMBERSHIP REQUIREMENTS

The Committee shall be comprised of at least two Board members, each of whom shall satisfy the independence requirements of the Nasdaq Stock Market ("Nasdaq"), any corporate governance guidelines of the Company that may be in effect from time to time and applicable law; provided, however, that one director who does not satisfy the Nasdaq independence criteria and is not an executive officer of the Company, an employee or a family member of an executive officer of the Company may, subject to approval of the Board, serve on the Committee pursuant to, and subject to the limitations under, the "exceptional and limited circumstances" exception provided in the rules of Nasdaq.

In addition, at least two members of the Committee must qualify as "non-employee directors" for purposes of Rule 16b-3 under the Securities Exchange Act of 1934, as amended (the "*Exchange Act*"). A Board member shall not serve on the Committee if any executive officer of the Company serves on the board of directors of an entity that employs such Board member as an executive officer.

The members of the Committee shall be appointed by the Board on the recommendation of the Nominating and Corporate Governance Committee of the Board and shall serve until their successors are duly elected and qualified or until their earlier resignation, removal or death. Any member of the Committee may be removed or replaced by the Board at any time with or without cause. Unless a Committee Chair is elected by the full Board, the members of the Committee

may designate a Chair by the majority vote of the full Committee. The Chair shall preside at all regular meetings of the Committee and set the agenda for each Committee meeting.

In fulfilling its responsibilities, the Committee shall, to the extent permitted by law, be entitled to delegate any or all of its responsibilities to one or more subcommittees of the Committee comprised of one or more members of the Committee. To the extent necessary to comply with Rule 16b-3 under the Exchange Act, the "non-employee directors," acting as a subcommittee, shall have authority to act on behalf of the Committee.

The Committee shall have the authority to obtain advice or assistance from compensation consultants, independent legal counsel, accounting or other advisors as appropriate to perform its duties hereunder. Without limiting the generality of the foregoing, the Committee shall have sole authority to retain or obtain the advice of any compensation consultant, independent legal counsel or other advisor to assist the Committee in the performance of its duties and shall be directly responsible for the appointment, compensation and oversight of the work of any compensation consultant, independent legal counsel or other advisor. Prior to selecting, or receiving advice from, any advisor, the Committee shall consider the independence of such advisor based on any applicable criteria specified by the Securities and Exchange Commission ("SEC") and Nasdaq, including Nasdaq Rule 5605(d)(3) (or any successor rule); provided, however, that the Committee shall not be prohibited from obtaining advice from advisors that it determines are not independent. The Company shall provide appropriate funding, as determined by the Committee, for payment of the fees and costs of any consultant, legal counsel or other advisor retained by the Committee to assist it in performing its duties hereunder.

### III. MEETINGS AND COMMITTEE ACTION

The Committee shall meet as often as it deems necessary to fulfill its responsibilities hereunder, but not less frequently than four times each year. The Committee may request that any employee of the Company attend any of its meetings or meet with any Committee member or any consultant or advisor to the Committee. The Committee shall meet at least annually with the Company's chief executive officer and such other senior executives of the Company as the Committee deems appropriate; provided, however, that the chief executive officer may not be present during deliberations or voting regarding his or her compensation. The Committee shall meet periodically in executive session without the presence of management.

Formal action to be taken by the Committee shall be by the affirmative vote of at least a majority of the members present (in person or by telephone conference call) at a meeting at which a quorum is present or by unanimous written consent. A quorum shall consist of at least a majority of the members of the Committee. Any actions taken by the Committee during any period in which one or more of the members fail for any reason to meet the membership requirements set forth above shall still constitute duly authorized actions of the Committee for all corporate purposes. The Committee shall maintain written minutes of its meetings, which minutes shall be filed with the minutes of the meetings of the Board.

# IV. AUTHORITY AND RESPONSIBILITIES

The Committee shall have the following authority and responsibilities, subject to such modification and additional authority as the Board may approve from time to time:

- Establish and periodically review and advise the Board concerning the Company's overall compensation philosophy, policies and plans.
- Identify and approve any peer group of companies to be used for comparison purposes in connection with any review of executive officer compensation.
- Review and make recommendations to the Board regarding all compensation of the Company's chief executive officer and all other executive officers (including but not limited to salary, bonus, incentive compensation, equity awards, benefits and perquisites), as well as any employment or service-related contracts, including employment contracts and consulting, severance or termination arrangements. In reviewing and making recommendations regarding executive compensation, the Committee shall consider the results of the most recent shareholder advisory vote on executive compensation required by Section 14A of the Exchange Act, if and when applicable.
- Evaluate the performance of all executive officers against previously established performance goals and recommend to the Board the level of achievement under such goals.
- Review and make recommendations to the Board regarding director compensation and benefits for service on the Board and Board committees.
- Make recommendations to the Board regarding the establishment and terms of the Company's incentive compensation plans and equity-based plans and administer such plans. Make recommendations to the Board regarding any proposed changes to the Company's equity-based plan reserves.
- Recommend to the Board stock ownership guidelines for the Company's executive
  officers and non-employee directors, and periodically assess such guidelines and
  recommend revisions, as appropriate. Monitor compliance with such guidelines and
  report to the Board, as necessary.
- Approve grants of options and other equity awards to all executive officers and directors under the Company's equity compensation plans, subject to and in accordance with the terms of such plans and such procedures or guidelines with respect to the grant of equity awards as may be adopted from time to time by the Board.
- Approve grants of options and other equity awards to all other eligible individuals under the Company's equity compensation plans, subject to and in accordance with the terms of such plans and such procedures or guidelines with respect to the grant of equity awards as may be adopted from time to time by the Board.

- Make recommendations to the Board regarding compensation-related matters outside the
  ordinary course, including but not limited to employment agreements, severance or
  change-in-control plans or arrangements, and all material amendments thereto. Lead
  negotiations of such agreements and arrangements.
- Establish and periodically review policies in the area of executive officers perquisites and expense accounts.
- Make recommendations to the Board regarding all employee benefit plans for the Company.
- Monitor and assess risks, including regulatory risks, associated with the Company's compensation arrangements and policies and consult with management regarding such risks.
- Consider, on at least an annual basis, management's assessment of whether risks arising from the Company's compensation policies and practices for all employees, included non-executive officers, are reasonably likely to have a material adverse effect on the Company.
- Monitor compliance by executives with the rules and guidelines of the Company's equity-based plans.
- Prepare an annual report on executive compensation, including a Compensation Discussion and Analysis, for inclusion in the Company's proxy statement for the annual meeting of shareholders, if and when applicable in accordance with rules and regulations of the SEC.
- Review and make recommendations to the Board regarding shareholder proposals related to compensation matters.
- Oversee, in conjunction with the Board, engagement with shareholders and proxy advisory firms on executive compensation matters.
- Oversee the administration of the Company's clawback policy, and review and recommend changes in the policy to the Board for approval from time to time as appropriate.
- Report to the Board on the Committee's activities on a regular basis.
- Perform such other functions and activities consistent with this Charter, the Company's Bylaws and governing law as the Committee deems necessary or as the Board may direct.

# V. PERIODIC REVIEW

The Committee shall review on at least an annual basis (i) this Charter and the scope of responsibilities of the Committee and (ii) the Committee's performance of its duties. Any

proposed changes to this Charter or the scope of the Committee's responsibility	es, w	here
indicated, shall be referred to the Board for appropriate action.		