ENZO BIOCHEM INC. NOMINATING/GOVERNANCE CHARTER

1. Purpose

The purpose of the Nominating/Governance Committee is to identify (consistent with criteria approved by the Board), screen and recommend to the Board of Directors appropriate candidates to serve as Directors of the Company, to oversee the process for evaluating the performance of the Board and to develop, recommend to the Board and monitor Nominating/Governance guidelines applicable to the Company.

2. Organization

Composition and Qualifications

The Nominating/Governance Committee shall be appointed by the Board of Directors from time to time and shall consist of three or more directors, each of whom shall meet the independence requirements of the New York Stock Exchange. The Board of Directors shall appoint one member of the Nominating/Governance Committee as the Chair.

Meetings / Minutes / Reports

The Nominating/Governance Committee shall meet at least three times annually in person, or more frequently if circumstances dictate. Additional meetings may be conducted telephonically.

The Chair (or in his or her absence, a member designated by the Chair) shall preside at all meetings of the Nominating/Governance Committee. The Chair shall be responsible for leadership of the Committee, including scheduling meetings, preparing agendas and making regular reports to the Board of Directors.

The Nominating/Governance Committee shall have complete access to management. The Nominating/Governance Committee may invite members of management or others to attend the Committee's meetings and provide pertinent information as appropriate.

Minutes of each Nominating/Governance Committee shall be prepared and sent to all Nominating/Governance Committee members.

The Nominating/Governance Committee shall evaluate and assess the effectiveness of the Committee and the adequacy of this Nominating/Governance Committee Charter on an annual basis and recommend any proposed changes to the Board of Directors.

Authority

The Nominating/Governance Committee shall have the authority to retain and approve the fees and retention terms of external legal or other advisors, as it deems appropriate.

3. Responsibilities and Duties

Board Matters

The Nominating/Governance Committee shall develop and recommend to the Board of Directors for approval, criteria to identify, assess the qualifications of and evaluate candidates for the Board of Directors. Based on such criteria and evaluation, the Committee shall recommend to the Board of Directors candidates to be elected by the shareholders at each annual shareholders' meeting, and as necessary to fill vacancies and newly created directorships.

The Nominating/Governance Committee shall evaluate the contributions and independence of incumbent Directors to determine whether to recommend them for reelection. Based on such

evaluation, the Committee shall recommend to the Board of Directors candidates for reelection to the Board at each annual shareholders' meeting.

The Nominating/Governance Committee shall establish a procedure for the consideration of Board candidates recommended by the Company's shareholders.

The Nominating/Governance Committee shall make recommendations to the Board of Directors concerning the structure, composition and functioning of the Board and its committees, and shall recommend to the Board candidates for appointment to Board committees.

The Nominating/Governance Committee shall review the compensation of directors for service on the Board and its Committees and recommend changes in compensation to the Board.

Monitor compliance by directors with the Company's stock ownership guidelines.

Governance Guidelines

The Nominating/Governance Committee shall develop and recommend to the Board of Directors a set of Nominating/Governance guidelines.

The Nominating/Governance Committee shall periodically review and assess the adequacy of the Nominating/Governance Guidelines of the Company and recommend any proposed changes to the Board of Directors for approval.

Succession Planning

The Nominating/Governance Committee shall periodically review the Company's succession plans with respect to the Chief Executive Officer and other senior management members.

Evaluations

The Nominating/Governance Committee shall determine the process for and facilitate the annual evaluation of the Board of Directors and its Committees. The Committee shall review the evaluation, report to the Board of Directors with respect to the evaluation and make recommendations to the Board regarding any proposed changes.