

COMPENSATION COMMITTEE CHARTER SIGMA-ALDRICH CORPORATION

The Board of Directors of Sigma-Aldrich Corporation (the “Company”) hereby adopts this Charter to govern the composition of its Compensation Committee (the “Committee”) and the scope of the Committee’s duties and responsibilities, and to set forth specific actions the Board of Directors expects the Committee to undertake to fulfill those duties and responsibilities.

I. STATEMENT OF PURPOSE

The purpose of the Committee is to approve the policies and oversee the practices of the Company with respect to the compensation made available to the Company’s management so as to enable the Company to attract and retain high quality leadership in a manner consistent with the stated compensation strategy of the Company, internal equity considerations, competitive practice, and the requirements of appropriate regulatory bodies and to communicate to shareholders the Company’s compensation policies and the reasoning behind such policies as required by the Securities and Exchange Commission.

II. COMPOSITION OF THE COMPENSATION COMMITTEE

The Committee shall be comprised of at least three members of the Board, with the number of members to be determined from time to time by the Board. The members shall be designated by the Board. The Committee is composed exclusively of independent Directors.

III. MEETINGS

The Committee shall meet at least once annually, or more frequently as the Committee may from time to time determine to be appropriate. Unless the Board has previously designated a Chair, the members of the Committee may designate a Chair by majority vote. A majority of the Committee members shall constitute a quorum.

Teleconferences may also be held at such other times as shall be reasonably requested by the Chairman of the Board or the Chairman of the Committee.

The Chair shall prepare the agenda for Committee meetings, after consultation with the Chairman of the Board and Chief Executive Officer and subject to the right of the Committee members to suggest additional items for the agenda. Agendas are shared with Committee members in advance of meetings. As a general rule, subject to appropriate procedures to protect the confidentiality of particularly sensitive information, appropriate background and explanatory materials concerning matters to be discussed at Committee meetings shall be sent to Committee members in advance.

Committee meetings will normally be attended by the Chairman of the Board, unless the matter or matters to be discussed at the meeting would make it appropriate to excuse him/her. At the invitation of the Chair, meetings may also be attended by other members of management and other persons as are appropriate to matters under consideration. At least once each year, the Committee will meet outside the presence of any employees of the Company, including any employee Directors. Compensation of the Chief Executive Officer shall be determined by the Committee meeting in executive session.

The Committee and its members have complete access to management, recognizing that it is expected that members will use judgment to be sure that this access is not distracting to the business operations of the Company. The Committee may engage the services of outside advisors (including experts in the field of executive compensation) if it shall determine such services to be necessary or appropriate for the proper discharge of its duties. Should any member of the Committee believe that participation of management or outside advisors in discussion of a particular subject would be advisable, they are encouraged to make that request.

The Chair will present an oral report of Committee meetings and other proceedings at each Board meeting. Proposals which require Board action will normally be submitted by the Committee to the Board in writing.

IV. DUTIES AND RESPONSIBILITIES OF THE COMPENSATION COMMITTEE

The duties and responsibilities of the Committee shall include the following:

A. Compensation Strategy and Policies. Review from time to time and approve the Company's stated compensation strategy so that management is rewarded appropriately for its contributions to Company growth and profitability and that the executive compensation strategy supports organization objectives and shareholder interests.

Review management's recommendations and advise management on broad compensation policies such as salary ranges, deferred compensation, incentive programs and executive stock plans.

B. CEO Evaluation and Compensation. Evaluate annually the Chief Executive Officer, including a discussion of such evaluation with the outside members of the Board. The evaluation should include an assessment based on both subjective and objective criteria including performance of the business, accomplishment of long-term strategic objectives, development of management, etc. The evaluation will be communicated to the Chief Executive Officer by the Chair of the Committee, and will be used by the Committee in the course of its deliberations when considering the compensation of the Chief Executive Officer.

Review annually and determine the individual elements of total compensation for the Chief Executive Officer and the goals applicable thereto, and communicate in the annual Board Compensation Committee Report to shareholders the factors and criteria on which the Chief Executive Officer's compensation for the last year was based, including the relationship of the Company's performance to the Chief Executive Officer's compensation.

C. Senior Management Compensation. Review and approve the individual elements of total compensation for the senior management of the Company other than the Chief Executive Officer and communicate in the annual Board Compensation Committee Report to shareholders the specific relationship of the Company's performance to executive compensation.

D. Incentive Plans. Oversee the administration of the Company's incentive plans with respect to consistency with the Company's compensation strategy as to participation, target annual awards, corporate financial goals, and actual awards paid to senior management.

E. Bonus and Option Plans. As appropriate, consider, establish any goals for, and approve the grant of awards under the Company's bonus, option or other incentive plans to the Chief Executive Officer and, in consultation with the Chief Executive Officer, to other members of management.

F. New Plans and Amendments. Approve, subject, where appropriate, to submission to the full Board and the shareholders, new, or amendments to current, compensation and incentive plans for senior management.

G. Succession Planning. The Chair of the Committee should establish a mechanism with the Chief Executive Officer so that, on a continuing basis, the Chief Executive Officer's recommendation of a successor should he/she be unexpectedly disabled can be made available to the Board.

H. Committee Performance. Review, annually, the Committee's performance and determine whether improvements can be made.

I. General. Perform such other functions which from time to time may be assigned by the Board of Directors or specifically required of the Committee by the provisions of any compensation or benefit plan maintained by the Company.