CHARTER FOR THE

COMPENSATION COMMITTEE OF

MARINA BIOTECH, INC.

Amended and Restated as of July 21, 2010

PURPOSE:

The purpose of the Compensation Committee (the "Committee") of the Board of Directors (the "Board") of Marina Biotech, Inc. (the "Company") shall be to discharge the Board's responsibilities relating to compensation of the Company's executive officers, including the Chief Executive Officer (the "CEO"), to oversee all compensation programs involving the use of the Company's stock, and to produce an annual report on executive compensation for inclusion in the Company's proxy statement for its annual meeting of stockholders, in accordance with applicable rules and regulations.

COMMITTEE MEMBERSHIP AND ORGANIZATION:

The Committee will be appointed by and will serve at the discretion of the Board. The Committee shall consist of no fewer than two members. The members of the Committee shall meet the (i) independence requirements of the listing standards of the Nasdaq National Market, (ii) non-employee director definition of Rule 16b-3 promulgated under Section 16 of the Securities Exchange Act of 1934, as amended, and (iii) the outside director definition of Section 162(m) of the Internal Revenue Code of 1986, as amended.

The members of the Committee will be appointed by the Board. Committee members will serve at the discretion of the Board. A chair shall be elected by the Board. The Committee shall meet at such times as it deems necessary to carry out its responsibilities. The Chair of the Committee and/or the Board may call such meetings.

COMMITTEE RESPONSIBILITIES AND AUTHORITY:

- The Committee shall work with management to articulate and periodically review the executive compensation philosophy of the Company. The executive compensation philosophy will be aligned with the Company's strategic direction. The elements of the compensation plan will be designed to incentivize management to achieve the Company's short and long term goals.
- The Committee shall annually review, approve, and recommend that the Board approve (a) the annual base salary, (b) the annual incentive bonus, including the specific goals and amount, (c) equity compensation, (d) employment agreements, severance arrangements, and change in control agreements/provisions, and (e) any other benefits, compensation or arrangements for the CEO, and the recommendations of the CEO for the other executive officers of the Company.

- The Committee shall review competitive practices and trends to determine the adequacy of the executive compensation program.
- The Committee shall annually review corporate goals and objectives relevant to CEO compensation, evaluate the CEO's performance in light of those goals and objectives, and recommend to the Board the CEO's compensation levels based on this evaluation.
- The Committee shall review and approve all compensation related disclosures in the Company's annual report and proxy statement for its annual meeting of stockholders, including without limitation the Compensation Discussion & Analysis, tabular presentations of executive and director compensation, and narrative disclosure of compensation and severance arrangements with the Company's executive officers.
- The Committee shall approve and administer cash incentives and deferred compensation plans for executive officers (including any modification to such plans) and oversight of performance objectives and funding for executive incentive plans.
- The Committee shall approve and oversee compensation programs involving the use of the Company's stock, including the administration of the Company's stock compensation plans.
- The Committee shall make reports to the Board as needed.
- The Committee shall review and reassess the adequacy of this Charter and recommend any proposed changes to the Board for approval.
- The Committee shall review its own performance.
- The Committee shall fulfill such other duties and responsibilities as may be assigned to it by the Board.
- The Committee shall prepare annual reports as required by the Securities and Exchange Commission.
- If appropriate, the Committee shall hire experts in the field of executive compensation to assist it with its evaluation of CEO or executive officer compensation. The Committee shall have the sole authority to retain and terminate any compensation consultant to be used by the Company to assist in the evaluation of CEO or executive officer compensation and shall have sole authority to approve the consultant's fees and other retention terms. The Committee shall also have authority to obtain advice and assistance from internal or external legal, accounting or other advisors.