

SPECTAIRE HOLDINGS INC.

COMPENSATION COMMITTEE CHARTER

I. Purpose

The purpose of the Compensation Committee (the “Committee”) of the board of directors (the “Board”) of Spectaire Holdings Inc., a Delaware corporation (the “Company”), is to oversee the discharge of the responsibilities of the Board relating to compensation of the Company’s executive officers and directors.

II. Composition

The Committee must consist of at least two (2) directors, each of whom must satisfy the independence requirements of the Nasdaq Stock Market LLC (the “Nasdaq”), subject to any available exception, and meet all other eligibility requirements of applicable law, unless otherwise determined by the Board. Committee members must be appointed to and may be removed from the Committee, with or without cause, by the Board. Unless a chair of the Committee (a “Chair”) is designated by the Board, the Committee may designate a Chair by majority vote of the full Committee membership.

The Company Secretary or his or her nominee shall act as the Secretary of the Committee and will ensure that the committee receives information and papers in a timely manner to enable full and proper consideration to be given to issues.

III. Meetings, Procedures and Authority

The Committee has the authority to establish its own rules and procedures for notice and conduct of its meetings so long as they are not inconsistent with any provisions of the Company’s bylaws that are applicable to the Committee.

The Committee may, in its sole discretion, retain or obtain advice from compensation consultants, legal counsel or other advisors (independent or otherwise), provided that, preceding any such retention or advice, the Committee must take into consideration the applicable factors under Nasdaq rules. The Committee will be directly responsible for the appointment, compensation and oversight of any advisor it retains. The Company must provide for appropriate funding, as determined by the Committee, for payment of reasonable compensation to any advisor retained by the Committee.

In addition to the duties and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities consistent with this Charter, the purposes of the Committee, the Company’s bylaws and applicable SEC and Nasdaq rules.

The Committee has the authority to conduct or authorize investigations into any matters within the scope of its responsibilities as it deems appropriate, including the authority to request

that any officer, employee or advisor of the Company meet with the Committee or any advisors engaged by the Committee.

IV. Duties and Responsibilities

1. *Chief Executive Officer Evaluation and Compensation.* The Committee will review and approve the corporate goals and objectives with respect to the compensation of the Chief Executive Officer. The Committee will evaluate the Chief Executive Officer's performance in light of these goals and objectives and, based upon this evaluation (either alone or, if directed by the Board, in conjunction with a majority of the independent directors on the Board), will set the Chief Executive Officer's compensation. The Chief Executive Officer may not be present during voting or deliberations on his or her compensation.

2. *Other Executive Officer Evaluation and Compensation.* The Committee will oversee an evaluation of the executive officers other than the Chief Executive Officer and, after considering such evaluation, will review and set, or make recommendations to the Board regarding the compensation of such executive officers.

3. *Employment Agreements.* The Committee will review and approve any employment and severance agreements arrangements for the Company's executive officers.

4. *Director Compensation.* The Committee will review and approve or make recommendations to the Board regarding director compensation.

5. *Incentive and Equity Compensation.* The Committee will review and make recommendations to the Board regarding the Company's incentive compensation and equity-based plans and arrangements (the "Plans"). The Committee has full authority to administer the Plans (except to the extent the terms of a Plan require administration by the full Board), and to make grants of cash-based and equity-based awards under the Plans.

6. *Compensation Discussion and Analysis.* To the extent that the Company is required to include a "Compensation Discussion and Analysis" ("CD&A") in the Company's Annual Report on Form 10-K or annual proxy statement, the Committee will review and discuss with management the Company's CD&A and will consider whether it will recommend to the Board that the Company's CD&A be included in the appropriate filing.

7. *Clawback Policy.* The Committee will administer and oversee the Company's compliance with any compensation recovery policy of the Company maintained by the Company, including but not limited to, any such policy required by applicable SEC and Nasdaq rules.

8. *Succession Planning.* The Committee will oversee the Company's succession planning for the Chief Executive Officer and other executive officer roles.

9. *Compensation Committee Report.* The Committee will prepare the annual Compensation Committee Report (if required pursuant to Item 407(e)(5) of Regulation S-K).

10. *Reports to the Board of Directors.* The Committee must report regularly to the Board regarding the activities of the Committee.

11. *Committee Self-Evaluation.* The Committee must periodically perform an evaluation of the performance of the Committee.

12. *Review of this Charter.* The Committee must annually review and reassess this Charter and submit any recommended changes to the Board for its consideration.

V. Delegation of Duties

In fulfilling its responsibilities, the Committee has the authority to delegate any or all of its responsibilities to a subcommittee of the Committee.