

**AMENDED AND RESTATED
AUDIT COMMITTEE CHARTER
OF INTERMOLECULAR, INC.**

This Audit Committee Charter was adopted by the Board of Directors (the “Board”) of Intermolecular, Inc., a Delaware corporation (the “Company”) on October 26, 2011, and amended on December 17, 2015.

I. Purpose

The purpose of the Audit Committee (the “Committee”) is to oversee the accounting and financial reporting processes of the Company and the audits of the financial statements of the Company.

In addition to the powers and responsibilities expressly delegated to the Committee in this Charter, the Committee may exercise any other powers and carry out any other responsibilities delegated to it by the Board from time to time consistent with the Company’s bylaws. The Committee shall report regularly to, and review with, the Board any issues that arise with respect to the quality or integrity of the Company’s financial statements, the Company’s compliance with legal or regulatory requirements, the performance and independence of the Company’s independent auditor, the performance of the Company’s internal audit function, if any, or any other matter the Committee determines is necessary or advisable to report to the Board.

Notwithstanding the foregoing, the Committee’s responsibilities are those of oversight. Management of the Company is responsible for the preparation, presentation and integrity of the Company’s financial statements as well as the Company’s financial reporting process, accounting policies, internal audit function, internal accounting controls and disclosure controls and procedures. The independent auditor is responsible for performing an audit of the Company’s annual financial statements, expressing an opinion as to the conformity of such annual financial statements with U.S. generally accepted accounting principles (“GAAP”) and reviewing the Company’s quarterly financial statements. It is not the responsibility of the Committee to plan or conduct audits or to determine that the Company’s financial statements and disclosures are complete and accurate or that they were prepared in accordance with GAAP and applicable laws, rules and regulations. Absent actual knowledge to the contrary, each member of the Committee shall be entitled to rely on the integrity of those persons within the Company and of the professionals and experts (including the Company’s internal auditor, if any, (or others responsible for the internal audit function, including contracted non-employee or audit or accounting firms engaged to provide internal audit services, if any) (the “internal auditor”), and the Company’s independent auditor from which the Committee receives information and, absent actual knowledge to the contrary, the accuracy of the financial and other information provided to the Committee by such persons, professionals or experts.

Further, auditing literature, particularly Statement of Auditing Standards No. 100, defines the term “review” to include a particular set of required procedures to be undertaken by independent auditors. The members of the Committee are not independent auditors, and the term “review” as used in this Charter is not intended to have that meaning and should not be

interpreted to suggest that the Committee members can or should follow the procedures required of auditors performing reviews of financial statements.

II. Membership

The Committee shall consist of at least three (3) members of the Board; provided, that if at any time there is a vacancy on the Committee and the remaining members meet all membership requirements, then the Committee may consist of two (2) members until the earlier of the Company's next annual stockholders meeting or one (1) year from the occurrence of the vacancy, unless the next annual stockholders meeting occurs within 180 days following the occurrence of the vacancy, in which case the Committee may consist of two (2) members until the end of such 180-day period. Each Committee member must be able to read and understand fundamental financial statements, including a company's balance sheet, income statement and cash flow statement. Members of the Committee are not required to be engaged in the accounting and auditing profession and, consequently, some members may not be expert in financial matters, or in matters involving auditing or accounting. However, at least one (1) member of the Committee shall have past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities. In addition, at least one (1) member of the Committee shall be an "audit committee financial expert" within the definition adopted by the Securities and Exchange Commission (the "SEC") or the Company shall disclose in its periodic reports required pursuant to the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder (as so amended and inclusive of such rules and regulations, the "Exchange Act"), the reasons why at least one (1) member of the Committee is not an "audit committee financial expert." In addition, to the extent required by or deemed advisable under applicable laws or regulations, each Committee member shall satisfy the independence requirements of The NASDAQ Stock Market LLC ("NASDAQ") and Rule 10A-3(b)(1) under the Exchange Act, subject to the exemptions set forth in Rule 10A-3(b)(1)(iv) under the Exchange Act.

The members of the Committee, including the Chairperson of the Committee (the "Chair"), shall be appointed by the Board. Committee members may be removed from the Committee, with or without cause, by the Board.

III. Meetings and Procedures

The Chair (or in his or her absence, a member designated by the Chair) shall preside at each meeting of the Committee and set the agendas for Committee meetings. The Committee shall have 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 shall meet at least once during each fiscal quarter and more frequently as the Committee deems desirable. The Committee shall meet separately, periodically, with management, with the internal auditor and with the independent auditor.

All non-management directors who are not members of the Committee may attend and observe meetings of the Committee, but shall not participate in any discussion or deliberation unless invited to do so by the Committee, and in any event shall not be entitled to vote.

The Committee shall have the appropriate resources and authority to request, at its discretion, in its meetings the attendance of members of the Company's management, representatives of the independent auditor, the internal auditor, if any, any other financial personnel employed or retained by the Company or any other persons whose presence the Committee believes to be necessary or appropriate. Notwithstanding the foregoing, the Committee may also exclude from its meetings any persons it deems appropriate, including, but not limited to, any non-management director who is not a member of the Committee.

The Committee shall have the appropriate resources and authority to retain any independent counsel, experts or advisors (accounting, financial or otherwise) that the Committee believes to be necessary or appropriate. The Committee may also utilize the services of the Company's regular legal counsel or other advisors to the Company. The Company shall provide for appropriate funding, as determined by the Committee, for payment of compensation to the independent auditor for the purpose of rendering or issuing an audit report or performing other audit, review or attestation services, for payment of compensation to any advisors employed by the Committee and for ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

The Committee shall have the appropriate resources and authority to conduct or authorize investigations into any matters within the scope of the powers and responsibilities delegated to the Committee. The Committee shall have full access to all books, records, facilities and personnel of the Company to conduct such investigations.

IV. Powers and Responsibilities

Interaction with the Independent Auditor

1. *Appointment and Oversight.* The Committee shall be directly responsible for the appointment, compensation, retention, oversight and termination, if necessary, of the work of the independent auditor (including resolution of any disagreements between Company management and the independent auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work or performing other audit, review or attestation services for the Company, and the independent auditor shall report directly to the Committee.

2. *Pre-Approval of Services.* Before the independent auditor is engaged by the Company or its subsidiaries to render audit or non-audit services, the Committee shall pre-approve the engagement. Committee pre-approval of audit and non-audit services will not be required if the engagement for the services is entered into pursuant to pre-approval policies and procedures established by the Committee regarding the Company's engagement of the independent auditor, provided the policies and procedures are detailed as to the particular service, the Committee is informed of each service provided and such policies and procedures do not include delegation of the Committee's responsibilities under the Exchange Act to the Company's management. The Committee may delegate to one (1) or more designated members

of the Committee the authority to grant pre-approvals, provided such approvals are presented to the Committee at a subsequent meeting. If the Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Committee must be informed of each non-audit service provided by the independent auditor. Committee pre-approval of non-audit services (other than review and attestation services) also will not be required if such services fall within available exceptions established by the SEC.

3. *Independence of Independent Auditor.* The Committee shall, at least annually, review the independence and quality control procedures of the independent auditor and the experience and qualifications of the independent auditor's senior personnel that are providing audit services to the Company. In conducting its review:

(i) The Committee shall obtain and review a report prepared by the independent auditor describing (a) the auditing firm's internal quality-control procedures and (b) any issues raised by the most recent internal quality-control review, or peer review, of the auditing firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five (5) years, respecting one (1) or more independent audits carried out by the auditing firm, and any steps taken to deal with any such issues.

(ii) The Committee shall ensure that the independent auditor prepare and deliver, at least annually, a written statement delineating all relationships between the independent auditor and the Company, consistent with Public Company Accounting Oversight Board Rule 3526. The Committee shall actively engage in a dialogue with the independent auditor with respect to any disclosed relationships or services that, in the view of the Committee, may impact the objectivity and independence of the independent auditor. If the Committee determines that further inquiry is advisable, the Committee shall take appropriate action in response to the independent auditor's report to satisfy itself of the auditor's independence.

(iii) The Committee shall confirm with the independent auditor that the independent auditor is in compliance with the partner rotation requirements established by the SEC.

(iv) The Committee shall monitor whether the auditor's independence is maintained, including by reviewing the non-audit services provided to the Company by the auditor. Prohibited services under Section 10A(g) of the Exchange Act will include: (i) bookkeeping or other services related to the accounting records or financial statements of the Company; (ii) financial information systems design and implementation; (iii) appraisal or valuation services, proving fairness opinions or preparing contribution-in-kind reports; (iv) actuarial services; (v) internal audit outsourcing services; (vi) management functions or human resources; (vii) broker or dealer, investment adviser or investment banking services; (viii) legal services and expert services unrelated to the audit; (ix) any other service that the Public Company Accounting Oversight Board prohibits through regulation.

Annual Financial Statements and Annual Audit

4. *Meetings with Management, the Independent Auditor and the Internal Auditor, if any.*

(i) The Committee shall meet with management, the independent auditor and the internal auditor, if any, in connection with each annual audit to discuss the scope and timing of the audit, the overall strategy, the procedures to be followed and the staffing of the audit.

(ii) The Committee shall review and discuss with management and the independent auditor: (A) major issues regarding accounting principles and financial statement presentations, including any significant changes in the Company's selection or application of accounting principles, and major issues as to the adequacy of the Company's internal controls and any special audit steps adopted in light of material control deficiencies, if any; (B) any analyses prepared by management or the independent auditor setting forth significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements, including analyses of the effects of alternative GAAP methods on the Company's financial statements; (C) the effect of regulatory and accounting initiatives, as well as off-balance sheet structures, on the Company's financial statements and (D) the type and presentation of information to be included in earnings press releases, as well as any financial information and earnings guidance provided to analysts and rating agencies.

(iii) The Committee shall review and discuss the annual audited financial statements and quarterly unaudited financial statements with management and the independent auditor, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

5. *Separate Meetings with the Independent Auditor.*

(i) The Committee shall review with the independent auditor any problems or difficulties the independent auditor may have encountered during the course of the audit work, including any restrictions on the scope of activities or access to required information or any significant disagreements with management and management's responses to such matters. Among the items that the Committee should consider reviewing with the independent auditor are: (A) any accounting adjustments that were noted or proposed by the auditor but were "passed" (as immaterial or otherwise); (B) any communications between the audit team and the independent auditor's national office respecting auditing or accounting issues presented by the engagement; and (C) any "management" or "internal control" letter issued, or proposed to be issued, by the independent auditor to the Company. The Committee shall obtain from the independent auditor assurances that the independent auditor has provided all notices of illegal acts as required by Section 10A(b) of the Exchange Act.

(ii) The Committee shall discuss with the independent auditor the report that such auditor is required to make to the Committee regarding: (A) all accounting policies and practices to be used that the independent auditor identifies as critical; (B) all alternative treatments within GAAP for policies and practices related to material items that have been discussed among management and the independent auditor, including the ramifications of the use

of such alternative disclosures and treatments, and the treatment preferred by the independent auditor; and (C) all other material written communications between the independent auditor and management of the Company, such as any management letter, management representation letter, reports on observations and recommendations on internal controls, independent auditor's engagement letter, independent auditor's independence letter, schedule of unadjusted audit differences and a listing of adjustments and reclassifications not recorded, if any.

(iii) The Committee shall discuss with the independent auditor the matters required to be discussed by Statement on Auditing Standards No. 114, "The Auditor's Communication with Those Charged with Governance," as then in effect.

(iv) The Committee shall discuss with the Company's independent auditors any other matters required to be discussed by Auditing Standards No. 16, Communications with Audit Committees.

6. *Recommendation to Include Financial Statements in Annual Report.* The Committee shall, based on the review and discussions in paragraphs 4(iii) and 5(iii) above, and based on the disclosures received from the independent auditor regarding its independence and discussions with the auditor regarding such independence pursuant to paragraph 3(ii) above, determine whether to recommend to the Board that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year subject to the audit.

7. *Management Letters and Other Material Written Communications.* The Committee shall receive, review and discuss with the independent auditor and, if appropriate, management, an annual management letter discussing the Company's internal controls issued or proposed to be issued by the independent auditor and management's response, if any.

Quarterly Financial Statements

8. The Committee shall receive, review and discuss the quarterly financial statements with management and the independent auditor, including the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Other Powers and Responsibilities

9. The Committee shall discuss with management and the independent auditor the Company's earnings press releases, if any (with particular focus on any "pro forma" or "adjusted" non-GAAP information), as well as financial information and earnings guidance, if any, provided to analysts and rating agencies. The Committee's discussion in this regard may be general in nature (i.e., discussion of the types of information to be disclosed and the type of presentation to be made). The Committee should be furnished with an advance copy of each earnings release for its review prior to publication.

10. The Committee shall review all related party transactions required to be disclosed pursuant to SEC Regulation S-K, Item 404, on an ongoing basis and discuss with management the business rationale for the transactions and whether appropriate disclosures have been made. All such transactions must be approved by the Committee or by another independent committee

of the Board. The Committee shall keep the Company's independent auditors informed of the Committee's understanding of the Company's relationships and transactions with related parties that are significant to the Company and review and discuss with the Company's independent auditors the auditor's evaluation of the Company's identification of, accounting for, and disclosure of its relationships and transactions with related parties, including any significant matters arising from the audit regarding the Company's relationships and transactions with related parties..

11. The Committee shall review on a periodic basis, or as appropriate, any investment policy of the Company and recommend to the Board any changes to the investment policy.

12. The Committee shall review and request assurances from management that the Company is complying with the appropriate legal and audit requirements for any Company sponsored retirement plans, including the Company's 401(k) plan.

13. The Committee shall discuss with management and the independent auditor any correspondence from or with regulators or governmental agencies, any employee complaints or any published reports that raise material issues regarding the Company's financial statements, financial reporting process, accounting policies or internal audit function, if any.

14. The Committee shall discuss with the Company's chief legal officer, if any, or outside counsel any legal matters brought to the Committee's attention that could reasonably be expected to have a material impact on the Company's financial statements.

15. The Committee shall request assurances from management and the Company's internal auditors, if any, that the Company's foreign subsidiaries and foreign affiliated entities, if any, are in conformity with applicable legal requirements, including disclosure of affiliated party transactions.

16. The Committee shall discuss with management the Company's policies with respect to risk assessment and risk management. The Committee shall discuss with management the Company's significant financial and operational risk exposures and the actions management has taken to limit, monitor or control such exposures.

17. The Committee shall set clear hiring policies for employees or former employees of the Company's independent auditor.

18. The Committee shall establish procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters. The Committee shall also establish procedures for the confidential and anonymous submission by employees regarding questionable accounting or auditing matters.

19. The Committee shall provide the Company with the report of the Committee with respect to the audited financial statements required by Item 407 of Regulation S-K of the Exchange Act, for inclusion in the Company's annual proxy statements.

20. The Committee, through its Chair, shall report regularly to, and review with, the Board (i) any material issues that arise with respect to the Committee's performance of the

foregoing responsibilities, and (ii) any issues that arise with respect to the quality or integrity of the Company's financial statements, the Company's compliance with legal or regulatory requirements, the performance and independence of the Company's independent auditor, the performance of the Company's internal audit function, if any, or any other matter the Committee determines is necessary or advisable to report to the Board.

21. The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee of the Board (the "Nominating and Corporate Governance Committee") if deemed appropriate, perform an evaluation of the performance of the Committee and its members, including a review of the Committee's compliance with this Charter, and provide any written material with respect to such evaluation to the Board or the Nominating and Corporate Governance Committee, as appropriate, including any recommendations for changes in procedures or policies governing the Committee.

22. The Committee shall, at least annually and with input from the Nominating and Corporate Governance Committee if deemed appropriate, review and reassess this Charter and submit any recommended changes to the Board for its consideration.

23. The Committee shall annually review and assess internal controls and treasury functions including cash management procedures.