

## **ORCHID CELLMARK INC.**

### **AUDIT COMMITTEE CHARTER**

#### **I. PURPOSE**

The Audit Committee shall provide assistance to the board of directors (the “Board”) of Orchid Cellmark Inc. (the “Corporation”) in fulfilling the Board’s responsibility to the Corporation’s shareholders relating to the Corporation’s accounting, financial reporting practices, the system of internal control, the audit process, the quality and integrity of its financial reports and the Corporation’s process for monitoring compliance with laws and regulations and the code of conduct. The Audit Committee’s primary duties and responsibilities are to:

- Oversee that management has maintained the reliability and integrity of the accounting policies, financial reporting and disclosure practices of the Corporation;
- Oversee that management has established and maintained an independent relationship with its qualified independent auditors;
- Oversee that management has established and maintained processes to assure that an adequate system of internal control of financial reporting is functioning within the Corporation;
- Oversee the performance of the independent auditors and the Corporation’s internal audit function;
- Oversee that management has established and maintained processes to assure compliance by the Corporation with all applicable laws, regulations and corporate policy; and
- Oversee the Corporation’s processes to assess and manage financial and enterprise risk.

The Audit Committee’s responsibility is oversight. Management of the Corporation has the responsibility for the Corporation’s financial statements as well as the Corporation’s financial reporting process, principles, and internal controls. The independent auditor is responsible for performing an audit of the Corporation’s annual financial statements, expressing an opinion as to the conformity of such annual financial statements with generally accepted accounting principles and other matters as required from time to time by the rules and regulations of the Securities and Exchange Commission, reviewing the Corporation’s quarterly financial statements and other procedures. Each member of the Audit Committee shall be entitled to rely on (i) the integrity of those persons within the Corporation and of the professionals and experts (such as the independent auditor) from which it receives information, (ii) the accuracy of the financial and other information provided to the Audit Committee by such persons, professionals or experts absent actual knowledge to the contrary and (iii) representations made by management of the

independent auditor as to any non-audit services provided by the independent auditor to the Corporation.

## **II. AUTHORITY**

The Audit Committee has the authority to conduct or authorize investigations into any matters within its scope of responsibility. Its primary duties and responsibilities are to:

1. appoint, compensate, and oversee the work of any registered public accounting firm employed by the Corporation;
2. resolve any disagreements between management and the auditor regarding financial reporting;
3. pre-approve all auditing and non-audit services;
4. retain independent counsel, accountants, or others to advise the Audit Committee or assist in the conduct of an investigation;
5. seek any information it requires from employees—all of whom shall be directed to cooperate with the Audit Committee’s requests—or external parties; and
6. meet with Corporation’s officers, external auditors, or outside counsel, as necessary.

The Audit Committee intends to fulfill these responsibilities primarily by carrying out the activities enumerated in Section V of this Charter.

## **III. COMPOSITION AND PROCEDURES**

### **A. Membership and Appointment**

The Audit Committee shall be comprised of three or more directors as determined from time to time by the Board. The members of the Audit Committee shall be elected by the Board at the annual organizational meeting of the Board and shall hold office until their resignations or until their successors shall be duly elected and qualified.

All members of the Audit Committee shall be “independent,” as such term is defined in Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), in that each Audit Committee member may not, other than in his or her capacity as a director or member of any committee of the Board, (i) accept any consulting, advisory, or other compensatory fee from the Corporation; or (ii) be an affiliated person of the Corporation or any subsidiary thereof. In addition, all members of the Audit Committee shall qualify as “independent directors” for purposes of the listing standards of The NASDAQ Global Market (“NASDAQ”).

All members of the Audit Committee shall be familiar with basic finance and accounting practices and shall be able to read and understand fundamental financial statements at the time of their appointment to the Audit Committee. Furthermore, at least one member of the Audit Committee shall be financially sophisticated as defined by having experience in finance or

accounting, professional certification in accounting, or any other comparable experience or background, such as being or having been a CEO or CFO or other senior officer with financial oversight responsibilities. The Corporation shall disclose, in its annual report, whether or not, and if not, the reasons therefor, the Audit Committee includes at least one “audit committee financial expert,” as defined by Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act of 1933, as amended (the “Securities Act”).

B. Removal

The entire Audit Committee or any individual Audit Committee member may be removed without cause by the affirmative vote of a majority of the Board. Any Audit Committee member may resign effective upon giving oral or written notice to the Chairman of the Board, the Secretary of the Corporation, or the Board (unless the notice specifies a later time for the effectiveness of such resignation). The Board may elect a successor to assume the available position on the Audit Committee when the resignation becomes effective.

C. Chairperson

A chairperson of the Audit Committee (the “Chairperson”) may be designated by the Board. In the absence of such designation, the members of the Audit Committee may designate the Chairperson by majority vote of the full Audit Committee membership. The Chairperson shall determine the agenda for and the length of meetings and shall have access to management and to information relating to the Audit Committee’s purposes. The Chairperson shall establish such other rules as may from time to time be necessary and proper for the conduct of the business of the Audit Committee.

D. Delegation

The Audit Committee may, by resolution passed by a majority of the Audit Committee members, designate one or more subcommittees, each subcommittee to consist of one or more members of the Audit Committee. Any such subcommittee, to the extent provided in the resolutions of the Audit Committee and to the extent not limited by applicable law, shall have and may exercise all the powers and authority of the Audit Committee. Each subcommittee shall have such name as may be determined from time to time by resolution adopted by the Audit Committee. Each subcommittee shall keep regular minutes of its meetings and report the same to the Audit Committee or the Board when required.

**IV. MEETINGS**

The Audit Committee shall meet in executive session at least one time per year, or more frequently as circumstances dictate. All Audit Committee members are expected to attend each meeting, in person or via tele- or video-conference. An agenda and other briefing materials, as appropriate, will be prepared and provided to Audit Committee members in advance of the meeting.

The Audit Committee shall keep minutes of the proceedings of the Audit Committee. In addition to the specific matters set forth herein requiring reports by the Audit Committee to the

full Board, the Audit Committee shall report such other significant matters as it deems necessary concerning its activities to the full Board. The Audit Committee may appoint a Secretary whose duties and responsibilities shall be to keep records of the proceedings of the Audit Committee for the purposes of reporting Audit Committee activities to the Board and to perform all other duties as may from time to time be assigned to him or her by the Audit Committee, or otherwise at the direction of an Audit Committee member. The Secretary need not be a member of the Audit Committee or a Director and shall have no membership or voting rights by virtue of the position.

As part of its job to foster open communication, the Audit Committee should meet separately, at least annually, with management, the director of the internal auditing department and the independent auditor to discuss any matters that the Audit Committee or each of these groups believe should be discussed privately. In addition, the Audit Committee or at least its Chairperson should meet separately with the independent auditor, and management quarterly to review the Corporation's financial statements in accordance with Section V below.

## **V. RESPONSIBILITIES AND DUTIES**

The Audit Committee, in its capacity as a committee of the Board, shall be directly responsible for the appointment, retention, compensation, evaluation, oversight and, if necessary, termination of the registered public accounting firm(s) employed by the Corporation (including resolution of disagreements between management and the auditor regarding financial reporting) for the purpose of preparing or issuing an audit report or related work, and each registered public accounting firm shall report directly to the Audit Committee.

The following shall be recurring duties and responsibilities of the Audit Committee in carrying out its purposes. These duties and responsibilities are set forth below as a guide to the Audit Committee, with the understanding that the Audit Committee may alter or supplement them as appropriate under the circumstances, to the extent permitted by applicable law.

### **A. Document Review & Reporting Process**

1. Review and reassess, at least annually, the adequacy of this Charter, make recommendations to the Board and request approval for proposed changes, as conditions dictate, to update this Charter, and ensure appropriate disclosure as may be required by applicable law or regulation.
2. Review with management and the independent auditor the Corporation's annual financial statements and Form 10-K prior to the filing of the Form 10-K or prior to the release of earnings, including (i) the review of the Corporation's specific disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" and (ii) a discussion with the independent auditor of the matters required to be discussed by Statement of Auditing Standards No. 61 ("SAS No. 61").
3. Review with management and the independent auditor each Form 10-Q prior to its filing or prior to the release of earnings, including (i) the review of the Corporation's specific disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" and (ii) a discussion with the independent auditor of the matters

required to be discussed by SAS No. 61. The Chairperson of the Audit Committee may represent the entire Audit Committee for purposes of this review.

4. Discuss with management the Corporation's earnings press releases and review the type and presentation of information to be included therein, including the use of "pro forma" or "adjusted" non-GAAP information.
5. Review with management and the independent auditor the effect of regulatory and accounting initiatives that may affect the Corporation, as well as the effect of any off-balance sheet structures and transactions on the Corporation's financial statements.
6. Regularly report to the Board about Audit Committee activities, issues and related recommendations.
7. Provide an open avenue of communication between internal audit, the external auditors and the Board.
8. Report annually to the shareholders, describing the Audit Committee's composition, responsibilities and how they were discharged, and any other information required by applicable law or regulation, including approval of non-audit services.
9. Review any other reports the Corporation issues that relate to Audit Committee responsibilities.
10. Institute and oversee special investigations as needed.

B. Independent Auditor

1. Review the performance of the independent auditor and appoint or terminate the independent auditor. The Audit Committee has the sole authority and responsibility to select, evaluate, and where appropriate, replace the outside auditor. The independent auditor is ultimately accountable to the Audit Committee for such auditor's review of the financial statements and controls of the Corporation. The Audit Committee shall determine the appropriate compensation of the independent auditor.
2. Approve in advance all audit services and all permitted non-audit services, except where such services are determined to be *de minimis* under the Exchange Act. The Audit Committee may delegate, to one or more designated members of the Audit Committee, the authority to grant such pre-approvals. The decisions of any member to whom such authority is delegated shall be presented to the full Audit Committee at each of its scheduled meetings.
3. Oversee and ensure the independence of the auditor by:
  - receiving from, and reviewing and discussing with, the auditor, on a periodic basis, a formal written statement delineating all relationships between the auditor and the Corporation consistent with Independence Standards Board Standard 1 ("ISB No. 1");

- reviewing, and actively discussing with the Board, if necessary, and the auditor, on a periodic basis, any disclosed relationships or services between the auditor and the Corporation or any other disclosed relationships or services that may impact the objectivity and independence of the auditor;
  - recommending, if necessary, that the Board take appropriate action to satisfy itself of the auditor's independence; and
  - ensuring that the lead or coordinating audit partner having primary responsibility for the audit, or the audit partner responsible for reviewing the audit does not perform audit services for the Corporation for more than five (5) consecutive fiscal years.
4. Set clear hiring policies for employees or former employees of the Corporation's independent auditor.

C. Financial Reporting Process and Disclosure Matters

1. In consultation with the independent auditor and the internal auditors, review the integrity of the Corporation's financial reporting processes, both internal and external. The Audit Committee shall report regularly to and review with the full Board any issues that arise with respect to the quality or integrity of the Corporation's financial statements, compliance with legal or regulatory requirements, the performance and independence of the independent auditor, or the performance of the internal audit function.
2. Consider and approve, if appropriate, changes to the Corporation's auditing and accounting principles and practices as suggested by the independent auditor, management, or the internal auditing department.
3. Ensure that there exist regular systems of reporting to the Audit Committee by each of management, the independent auditor and the internal auditor regarding any significant judgments made in management's preparation of the financial statements and any significant difficulties encountered during the course of the review or audit, including any restrictions on the scope of work or access to required information.
4. Regularly review any significant disagreements among management and the independent auditor or the internal auditing department in connection with the preparation of the financial statements.
5. Ensure and oversee timely reports from the independent auditor to the Audit Committee of (i) all critical accounting policies and practices; (ii) all alternative treatments of financial information within generally accepted accounting principles that have been discussed with management officials of the Corporation, ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the independent auditor; and (iii) other material written communications between the independent auditor and the management of the Corporation, such as any management letter or schedule of unadjusted differences.

6. Discuss with management the Corporation's policies with respect to risk assessment and risk management, the Corporation's major financial and operational risk exposures and the steps management has taken to monitor and control such exposures.
7. Review disclosures made to the Audit Committee by the Corporation's Chief Executive Officer and Chief Financial Officer during their certification process for Forms 10-K and Forms 10-Q about any significant deficiencies in the design or operation of internal controls or material weaknesses therein and any fraud involving management or other employees who have a significant role in the Corporation's internal controls.

D. Financial Statements

1. Review significant accounting and reporting issues, including complex or unusual transactions (such as off-balance sheet structures, if any) and highly judgmental areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.
2. Review with management and the external auditors the results of the audit, including any difficulties encountered and any significant changes in the audit plan.
3. Review the annual financial statements, and consider whether they are complete, consistent with information known to Audit Committee members, and reflect appropriate accounting principles.
4. Review other sections of the annual report and related regulatory filings before release and consider the accuracy and completeness of the information.
5. Review with management and the external auditors all matters required to be communicated to the Audit Committee under generally accepted auditing standards.
6. Review interim financial reports with management and the external auditors before filing, and consider whether they are complete and consistent with the information known to Audit Committee members.

E. Internal Control/Risk Management

1. Consider the effectiveness of the Corporation's internal control system, including information technology security and control.
2. Understand the scope of internal and external auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with management's responses.
3. Review, monitor and oversee the Corporation's processes and procedures to identify, assess and manage financial and enterprise risk, including overseeing the Corporation's enterprise risk management program.

F. Internal Audit

1. Review and approve the appointment or termination of the director of internal audit.
2. Review the significant reports to management prepared by the internal auditing department and management's responses.
3. Review with management, the external auditors and the chief audit executive the charter, responsibilities, budget, plans, activities, staffing, and organizational structure of the internal audit function and any recommendations for changes in the planned scope of the internal audit.
4. Ensure there are no unjustified restrictions or limitations, and review and concur in the appointment, replacement, or dismissal of the chief audit executive.
5. Review and report to the Board the effectiveness of the internal audit function, including compliance with The Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing*.
6. On a regular basis, meet separately with the chief audit executive to discuss any matters that the Audit Committee or internal audit believes should be discussed privately.

G. External Audit

1. Review the external auditors' proposed audit scope and approach, including coordination of audit effort with internal audit.
2. Review the performance of the external auditors, and exercise final approval on the appointment or discharge of the auditors.
3. Review and confirm the independence of the external auditors by obtaining statements from the auditors on relationships between the auditors and the Corporation, including non-audit services, and discussing the relationships with the auditors.
4. On a regular basis, meet separately with the external auditors to discuss any matters that the Audit Committee or auditors believe should be discussed privately.

H. Approval of Related Person Transactions

1. Review and approve, prior to the Corporation's entry into any such transactions, all transactions in which the Corporation is a participant and in which any of the following persons has or will have a direct or indirect material interest:
  - executive officers of the Corporation;
  - members of the Board;
  - beneficial holders of more than 5% of the Corporation's securities;

- immediate family members<sup>1</sup> of any of the foregoing persons; and
  - any other persons whom the Board determines may be considered to be related persons as defined by Item 404 of Regulation S-K promulgated under the Securities Act.
2. In reviewing and approving such transactions, the Audit Committee shall obtain, or shall direct management to obtain on its behalf, all information that the Audit Committee believes to be relevant and important to a review of the transaction prior to its approval. Following receipt of the necessary information, a discussion shall be held of the relevant factors if deemed to be necessary by the Audit Committee prior to approval. If a discussion is not deemed to be necessary, approval may be given by written consent of the Audit Committee. This approval authority may also be delegated to the Chairperson of the Audit Committee in some circumstances. No related person transaction shall be entered into prior to the completion of these procedures.
  3. The Audit Committee or the Chairperson, as the case may be, shall approve only those related person transactions that are determined to be in, or not inconsistent with, the best interests of the Corporation and its stockholders, taking into account all available facts and circumstances as the Audit Committee or the Chairperson determines in good faith to be necessary. These facts and circumstances will typically include, but not be limited to, the benefits of the transaction to the Corporation; the impact on a Director's independence in the event the related person is a Director, an immediate family member of a Director or an entity in which a Director is a partner, shareholder or executive officer; the availability of other sources for comparable products or services; the terms of the transaction; and the terms of comparable transactions that would be available to unrelated third parties or to employees generally. No member of the Audit Committee shall participate in any review, consideration or approval of any related person transaction with respect to which the member or any of his or her immediate family members is the related person.
  4. The Audit Committee shall adopt any further policies and procedures relating to the approval of related person transactions that it deems necessary or advisable from time to time.

I. Legal Compliance/General

1. Review, with the Corporation's counsel, any legal matter that could have a significant impact on the Corporation's financial statements.
2. The Audit Committee may request any officer or employee of the Corporation or the Corporation's outside counsel or independent auditor to attend a meeting of the Audit Committee or to meet with any members of, or consultants to, the Audit Committee.

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<sup>1</sup> "Immediate family member" means any child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, and any person (other than a tenant or employee) sharing the household with the executive officer, director or 5% beneficial owner.

3. Regularly report through its Chairperson to the Board about Audit Committee activities, issues, and related recommendations.
4. When deemed necessary by the members of the Audit Committee, retain independent legal, accounting or other advisors or consultants to advise and assist the Audit Committee in carrying out its duties, without needing to seek approval for the retention of such advisors or consultants from the Board. The Audit Committee shall determine the appropriate compensation for any advisers retained by the Audit Committee. The Audit Committee may request any officer or employee of the Corporation or the Corporation's outside counsel or independent auditor to attend a meeting of the Audit Committee or to meet with any members of, or consultants to, the Audit Committee.
5. Establish procedures for (i) the receipt, retention, and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters; and (ii) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.
6. Review annually its own performance and report on its performance to the Board.
7. Confirm annually that all responsibilities set forth in the Charter have been carried out.
8. Perform any other activities consistent with this Charter, the Corporation's by-laws, and governing law, as the Audit Committee or the Board deems necessary or appropriate.

## **VI. COMPENSATION**

Audit Committee members shall be compensated by the Corporation solely in the form of directors' fees, which may be paid in cash or equity of the Corporation. Audit Committee members may, however, receive greater fees than those received for Board service by other Board members, in light of their heightened responsibilities to the Corporation.

The Audit Committee also recognizes that financial management and the internal and independent auditors have more knowledge and information about the Corporation than do the Audit Committee members. Consequently, in carrying out its oversight responsibilities, the Audit Committee is not providing any expert or special assistance as to the Corporation's financial statements or internal control or any professional certification as to the independent auditor's work.