ZION OIL & GAS, INC.

RESERVES AND ENVIRONMENT, HEALTH AND SAFETY COMMITTEE CHARTER

Purpose

The purpose of the Reserves and Environment, Health and Safety Committee (the "*Committee*") of the Board of Directors (the "*Board*") of Zion Oil & Gas, Inc. (the "*Company*") is to assist the Board with the Board's oversight of the integrity of the Company's oil, natural gas and natural gas liquids reserves (the "*reserves*") and the Board's oversight of matters related to the environment, health, and safety (the "*EHS*").

Committee Structure and Organization

Members.

The Committee shall consist of two or more directors, who shall be appointed by the Board and may be removed by the Board. The Board Committee members may select other directors, Company employees or other experts, who are not Board members or employees, to assist the Committee, or a subcommittee. All members shall have oil and gas industry experience and expertise to enable them to discharge their responsibilities.

Operation.

The Company shall provide the Committee with the resources necessary to satisfy its responsibilities, including the authority to engage, at the expense of the Company, independent legal counsel, engineers and such other advisors as the Committee deems necessary. The Board believes the duties and responsibilities of the Committee should remain flexible in order to best react to changing conditions and to enable the Committee to assure the Board and stockholders that the Company's reserves preparation procedures and reporting practices are in accordance with all legal and regulatory requirements. The Committee is therefore authorized to take such further actions as are consistent with the functions described in this Charter and to perform such other actions as required by the Board.

Meetings.

The Committee will meet a minimum of two times per year and at least annually will meet with:

- a. Management;
- b. The Company's reserves engineering personnel; and
- c. The Company's independent engineering consultants at the meeting where the Committee reviews the independent engineering consultants' reserve report or review letter.

The Committee shall meet in person or telephonically at such times and at such places as determined by the Committee Chair, and may act by unanimous written consent by the Board members.

Quorum.

A majority of the Board members of the Committee, but in no event less than two Board members, shall constitute a quorum for the meetings of the Committee.

Record Keeping.

The Committee Chair shall be responsible for establishing the agenda for a Committee meeting and the agenda may be distributed to the Committee members prior to each meeting. Minutes of all meetings may be prepared and submitted for approval at a subsequent Committee meeting, if desired.

Charter.

The Committee shall annually review and assess the adequacy of this Charter with the Board and recommend to the Board any changes. This Charter will be included on the Company's website.

Evaluation.

The Committee shall annually conduct a self-evaluation of its performance and activities and communicate the results to the Board.

Committee Authority and Responsibilities

The Committee shall perform, in consultation with the Company's reserves engineering personnel, the following duties and responsibilities, and report to the Board not less than once each year, and review any issues that arise with respect to:

Reserves

- Approve the appointment of, and any proposed change in, the independent engineering consultants retained to assist the Company in the annual review of the Company's reserves
- Approve the scope of and oversee an annual review or audit of the Company's reserves by the independent engineering consultants, having regard to industry practices and all applicable laws and regulations
- Review the qualifications and independence of the Company's independent engineering consultants
- Approve the independent engineering consultants' engagement fees and terms of service
- Monitor the performance of the Company's independent engineering consultants
- Meet annually, or more frequently if considered necessary or appropriate, with the Company's reserves engineering personnel and the independent engineering consultants of the Company to review and consider the evaluation of the reserves and any other matters of concern in respect of the evaluation of the reserves
- Review the integrity of the Company's reserves evaluation process and reporting system
- Oversee the Company's compliance with legal and regulatory requirements related to the Company's reserves
- Review any statement of reserves data, and any report of the independent engineering consultants regarding the reserves to be filed with any securities regulatory authority or to be disseminated to the public

- Review with the independent engineering consultants any reserves reporting problems or difficulties and management's response, including difficulties encountered in the course of the reserves engineering report preparation, any restrictions placed on the scope of the independent engineering consultants' activities or access to requested information, and any significant disagreements with management
- Review the Company's significant reserves engineering principles and policies and any significant changes thereto and any proposed changes in reserves engineering standards and principles which have, or may have, a material impact on the Company's reserves disclosure
- Review any material reserves adjustments
- Review variances between the Company's and the independent engineering consultant's estimates of reserves
- Assist as necessary in the resolution of any material disagreements or difficulties between the independent engineering consultants and management
- Initiate, when appropriate, investigations of matters within the scope of its responsibilities
- Perform such other duties and responsibilities as the Board shall approve and assign to the Committee

Environment, Health, and Safety

• Review at least annually the Company's policies, practices and procedures related to the environment, health, and safety ("*EHS*") and EHS risks, including relative to potential catastrophic problems, issues and high risk areas, and report to the Board. Review EHS results, near misses, actions undertaken, and the Company's efforts associated with the Company's EHS culture.

Reporting

The Committee will report to the Board not less than once each year, and review any issues that arise with respect to:

- The quality or integrity of the Company's reserves evaluations and reports
- The Company's compliance with legal or regulatory requirements
- The qualifications, performance and independence of the Company's independent engineering consultants
- All other issues which the Committee considers relevant or material

Delegation

The Committee may delegate its responsibilities under this Charter to a subcommittee comprised of one or more members of the Committee. The creation of such a subcommittee, as well as its purpose, will be reported to the Board.

Miscellaneous

While the Committee has the responsibilities and powers set forth in this Charter, it is not the duty of the Committee to conduct audits or to determine that the Company's reserve reports are complete and accurate and are in accordance with Securities and Exchange Commission rules and regulations, which is the responsibility of management and the independent reserve engineers.

The Committee will be entitled to rely upon Company management, independent reserve engineers and legal counsel to provide them with information, opinions and reports and the Committee will be protected in relying in good faith upon the records of the Company and such information, opinions or reports as to matters the Committee reasonably believes are within such other person's professional or expert competence to the fullest extent permitted by applicable law or regulation.