

ZION OIL & GAS, INC.

TECHNICAL, RESERVES AND ENVIRONMENT, HEALTH AND SAFETY COMMITTEE CHARTER

Purpose

The purposes of the Technical, Reserves and Environment, Health and Safety Committee (the "**Committee**") of the Board of Directors (the "**Board**") of Zion Oil & Gas, Inc. (the "**Company**") is (1) to provide a forum for the review and discussion of policies, processes and activities of a technical nature, which will assist Company operations and where additional knowledge may be useful to the Board from a strategic, technical risk, or governance perspective and (2) 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 (3) to support 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 shall assist the Board in fulfilling its obligations and responsibilities by engaging in discussions related to the technical aspects of the operations, where it is necessary for the Board to have an informed technical knowledge. The Committee will receive information and will make recommendations for approval to the Board where necessary. The Committee will report to the Board on issues and matters of a technical nature as necessary for the function of the Boards' needs. The Committee is authorized therefore 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 as required and 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

Technical

The Committee shall develop policies, programs and procedures to ensure the timely communication among the Committee members of technical information and the confidentiality of such technical information among its members. The Committee shall assist the Board in fulfilling its obligations and responsibilities by engaging in discussions related to the technical aspects of the operations, where it is necessary for the Board to have an informed technical knowledge. The Committee will receive information and will make recommendations for approval to the Board where necessary. The Committee will report to the Board on issues and matters of a technical nature as necessary for the function of the Boards' mandate.

The Committee may request management to conduct investigations into, or conduct or authorize investigations into any matter that the Committee believes is within its mandate on a technical matter. The Committee may contract advisors to assist in any investigation at the expense of the Company. The Committee shall report its findings and recommendations to the Board following each meeting and at additional times as the Committee Chair decides. The Committee shall have access to such officers and employees and to such information respecting the Company technical operations and may engage independent consultants and advisors at the expense of the Company, all as it considers to be necessary or advisable in order to perform its duties and responsibilities.

Reserves

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:

- 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 semi-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.
- We are committed to operating in an environmentally responsible manner and in compliance with all applicable US federal, state and local environmental laws and all applicable Israeli regulations and laws, including laws regulating emissions of greenhouse gases. We strive to meet the environmental expectations of key stakeholders, including regulatory agencies, government ministries, the communities in which we operate, landowners, employees and investors. We understand the importance of conducting our business in the right manner and are dedicated to employing best practices with respect to our sustainability efforts.

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, or any other independent consultants
- All other issues and all technical 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.

The Board Committee members have the sole discretion by the majority of the whole Committee to designate one or more subcommittees of directors, Company employees or other experts, who are not Board members or employees, to assist the Committee in carrying out the responsibilities and powers set forth in the Charter.

December 13, 2021