

CLIFFS NATURAL RESOURCES INC. CORPORATE GOVERNANCE GUIDELINES

The Board of Directors (the “Board”) of Cliffs Natural Resources Inc. (“Cliffs”) has adopted the following Corporate Governance Guidelines (“Guidelines”) as a framework within which the Board may conduct its business. These Guidelines should be interpreted in the context of all applicable laws and Cliffs’ other corporate governance documents.

Board Duties and Responsibilities

General: The primary purpose of the Board is to promote the long-term interests of Cliffs’ shareholders through oversight of the management of Cliffs’ business and affairs. To accomplish this purpose, the Board is committed to establishing a corporate culture of accountability, responsibility and ethical behavior by carrying out its responsibilities with honesty and integrity and through the careful selection and evaluation of senior management and Board members.

Principal Duties: The principal duties of the Board are to: (a) select and evaluate the Board Chairman and the Chief Executive Officer/President; (b) evaluate, approve and monitor the Chief Executive Officer/President’s strategic plan and annual management objectives; (c) review and appraise Cliffs’ operating performance; (d) maintain a comprehensive governance process and high standards of internal control, business ethics, and legal and regulatory compliance; (e) oversee Cliffs’ overall enterprise risk management program; and (f) maintain an effective management development and succession plan.

Director Responsibilities: Directors are expected to prepare for, attend, and participate in all meetings of the Board, its Committees on which they serve and the Annual Meeting of Shareholders; review materials distributed in advance of meetings; and make themselves available for periodic updates and briefings with management via telephone or one-on-one meetings. Directors are expected to devote the time and attention necessary to discharge their responsibilities appropriately.

Succession Planning: With the assistance of the Compensation and Organization Committee, the Board will develop and maintain a succession plan for the positions of Chief Executive Officer/President and Board Chair, including appropriate contingencies in the event that the Chief Executive Officer/President or Board Chair retires or is incapacitated. The Board Chair and Chief Executive Officer/President should make available their recommendations and evaluations of potential successors, along with any recommended development plans for such individuals.

Commitment Authority Levels: The Board periodically will review and approve procedures for the authorization of capital expenditures and other commitments of Cliffs, its subsidiaries and its associated companies.

Annual Evaluation: The Board and each Committee must perform an annual self-evaluation of its performance to determine whether the Board and Committees are functioning effectively. The Lead Director will also perform at least annually evaluations of the independent Directors. The Governance and Nominating Committee is responsible for overseeing the Board, Committee and independent director evaluation process.

Board Operations

Meetings: The Board must meet at least quarterly and typically convenes five regular meetings per year. The Board may hold special meetings as necessary.

Agendas and Board Materials: Board meeting agendas are prepared by members of Cliffs' management and approved by the Chief Executive Officer/President and the Lead Director and by the Board Chair when the Chief Executive Officer/President is not the Board Chair. Each Board member may submit items to be included on the agenda. Board members may also raise subjects that are not on the agenda at any meeting. All proposed resolutions for action at the meeting must be provided, if feasible, to each Director in advance of the meeting in order to allow sufficient time for advance review and discussion at the meeting.

Other Meeting Procedures: The Board Chair will chair Board meetings, except those meetings involving only independent Directors. If the Board Chair is not present, the Lead Director will chair Board meetings. The Board or the Chief Executive Officer/President may invite members of management to attend Board meetings (other than the meetings of independent Directors only) as appropriate under the circumstances and in light of the topics addressed at such meetings.

Access to Management and Advisors: Directors have access to Cliffs' management either (i) directly or (ii) by making arrangements through the Chief Executive Officer/President or the Secretary. Directors should ensure that any such contact is not disruptive to the business operations of Cliffs. As necessary and appropriate, the Board and its Committees may retain outside legal, financial and other advisors.

Executive Sessions of Independent Directors: At each Board meeting, time will be set aside for the independent Directors to meet in executive session without Cliffs' management. Additional executive sessions may be held as needed. The Lead Director or a majority of the independent Directors may call a meeting of the independent Directors at any time. The Lead Director will set the agenda, supervise the conduct of the meetings of independent Directors, and communicate the results of the meetings to the Chief Executive Officer/President, as appropriate.

Board Composition and Membership Criteria

Board Size: The Board will review and determine the number of Directors (in accordance with Cliffs' then current articles of incorporation and regulations) based on recommendations of the Governance and Nominating Committee.

Director Independence: A substantial majority of the members of the Board must be "independent" under the rules of the New York Stock Exchange, Inc. ("NYSE") and under applicable law.

Board Leadership: The Board will designate the Board Chair upon recommendation by the Governance and Nominating Committee. When the Chief Executive Officer/President or another Cliffs' executive is designated Board Chair, the Governance and Nominating Committee will recommend to the Board a Director who will serve as the "Lead Director." If an interim executive or non-executive Board Chair is designated, he or she also will serve as the Lead Director for purposes of these Guidelines. When an interim executive Board Chair is designated, the chair of the Governance and Nominating Committee will (a) preside at all meetings of the Board at which the Chair is not present, including executive sessions of the Independent Directors; (b) serve as liaison between the Chair and the Independent Directors; and (c) will evaluate the performance of the Independent Directors with the interim executive Chair.

Lead Director Responsibilities: Except as set forth in the preceding sentence, the duties and responsibilities of the Lead Director include the following: (a) preside at all meetings of the Board at which the Chair is not present, including executive sessions of the Independent Directors; (b) serve as liaison between the Chair and the Independent Directors; (c) ensure that he or she is

available for consultation and direct communication, if requested by major shareholders; (d) meet separately with each Director at least annually; (e) evaluate the performance of the Independent Directors; (f) has the authority to call meetings of the Independent Directors; (g) at least annually discuss with the Chief Executive Officer/President the results of the reviews by the Compensation and Organization Committee and Board of the Chief Executive Officer/President's performance and compensation level; and (h) such other duties as the Independent Directors may designate from time to time. In addition, to the extent practical, the Lead Director (i) approves information sent to the Board, (ii) approves meeting agendas for the Board, and (iii) approves meeting schedules to assure that there is sufficient time for discussion of all agenda items.

Board Membership Criteria: The Governance and Nominating Committee is responsible for reviewing with the Board, at least annually, the qualifications required of Board members, including specific experience, qualifications, attributes, judgment, skill, diversity, integrity, experience with businesses and other organizations of comparable size, the interplay of the candidate's experience with the experience of other Board members, and the extent to which the candidate would be a desirable addition to the Board and any Committees of the Board.

Selection of Director Nominees: The Governance and Nominating Committee is responsible for interviewing and recommending candidates for election to the Board in accordance with the policies and principles in its charter and the criteria described herein. The Governance and Nominating Committee is also responsible for reviewing the nomination of incumbent Directors for re-election to the Board as part of its annual review and selection process.

Service on Other Boards: A Director may not serve on more than three other public company boards of directors. Directors must advise the Chief Executive Officer/President and the Chair of the Governance and Nominating Committee in advance of accepting an invitation to serve on the board of directors of another public company. The Chief Executive Officer/President and other elected officers must seek the approval of the Governance and Nominating Committee before accepting membership on any public company board.

Changes in Circumstances: Any director who experiences a change in primary occupation, position or primary business affiliation, including retirement, or a change in personal circumstances that is reasonably likely to impair his or her service as a Board member, is expected to submit a letter of resignation promptly to the Board Chair and the Chair of the Governance and Nominating Committee, conditional upon acceptance by the Board.

Term Limits: The Board has not established term limits for Directors.

Retirement Policy: No director may stand for re-election after reaching age 72, although the Board may determine exceptions on an individual basis.

Resignations: A Director is expected to tender his or her resignation to the Board Chair if the Director is no longer eligible for membership under these Guidelines, has retired, resigned or been terminated as an employee of Cliffs, or cannot perform the duties of a Director. The Governance and Nominating Committee will review each such tendered resignation and recommend appropriate action to the Board. The Board has discretion whether to accept or reject any such tendered resignation.

Resignation on Failure to Obtain Majority Vote: The Board will nominate for election or re-election as a Director only those candidates who have submitted or agreed to submit a standing conditional resignation, in the form set forth on Annex B, that will be considered by the

Board in the event such candidate fails to receive the vote of a majority of the votes cast by shareholders at a meeting for the election of Directors.

Director Orientation and Continuing Education

New Director Orientation: New Directors are expected to attend a Cliffs' orientation program that includes presentations by senior management. Incumbent Directors will also be invited to participate in the orientation program.

Continuing Education: The Board encourages Directors to participate in continuing education programs sponsored by organizations specializing in director education. Cliffs will reimburse each Director for the reasonable expenses of attending such continuing director education programs (if the Director serves on other public company boards, on a pro rata basis).

Director Compensation and Stock Ownership

Compensation Policy: Independent Directors' compensation consists of a mix of an annual cash retainer paid quarterly and annual equity compensation, based on continued service on the Board and Cliffs' performance and other appropriate factors determined by the Board. The Governance and Nominating Committee annually will review the status of, and make recommendations to the Board regarding, compensation paid to independent Directors in relation to other comparable companies and other factors.

Stock Ownership Guidelines: The Governance and Nominating Committee periodically shall review Cliffs' minimum stock ownership guidelines for Directors and report any recommended changes to the Board.

Committees

Standing Committees: The standing committees of the Board include an Audit Committee, Compensation and Organization Committee, and Governance and Nominating Committee (the "Core Committees"). In addition, the Board has designated a Strategy and Sustainability Committee and may designate such other committees as it deems necessary from time to time.

Committee Authority: Each Committee will act only (i) by the affirmative vote of a majority of the members at a meeting at which a quorum is present or (ii) by unanimous written consent of all members of such Committee.

Appointment and Term of Service of Committee Members: Each Committee must consist of no fewer than three members, one of whom will serve as Chair of such Committee. The actual number of members of each Committee will be determined from time to time by the Board. The Board may appoint or remove any Committee member after considering the recommendations of the Governance and Nominating Committee. With the concurrence of the Committee Chair, the Board may appoint alternate members of each Committee to take the place of any absent member at any Committee meeting. Such participant will receive the same compensation for attendance at such meeting as a member of the Committee.

Each member of the Core Committees must be "independent" under the criteria established by NYSE rules and applicable law.

Committee Chairs: The Board directly appoints the Audit Committee Chair; all other Committee Chairs are approved by the Board based upon the recommendation of the Governance and

Nominating Committee. Each Committee Chair has such responsibilities as the respective Committee may designate from time to time.

Committee Meetings: Each Committee will meet as frequently as necessary to carry out its responsibilities under its respective charter. Meetings will be scheduled to allow sufficient time for deliberation on complex or substantial matters before required decisions or presentations to the Board. A majority of the number of members of such Committee constitutes a quorum for purposes of Committee meetings.

Each Committee Chair will, in consultation with the other members of such Committee and appropriate officers of Cliffs, establish the agenda for each Committee meeting. Any Committee member may submit items to be included on the agenda. Committee members also may raise subjects that are not on the agenda at any meeting. In the event of an unexpected absence of the Committee Chair, the Committee members will appoint a member to act as Chair.

Related Party Transactions Policy

Transactions with Directors: Except for employment arrangements with the Chief Executive Officer/President and/or other executives serving on the Board, if any, Cliffs does not engage in transactions with Directors or their affiliates if a transaction would cast into doubt the independence of a Director, present the appearance of a conflict of interest, or otherwise be prohibited by law, rule or regulation. Any waiver of this policy may be made only by the Board upon recommendation of the Governance and Nominating Committee or Audit Committee and must be promptly disclosed to Cliffs' shareholders.

Board Interaction with Investors, Media, Constituencies and Others

General Representation: The Chair, Chief Executive Officer/President and/or the Lead Director are to represent the Board and Cliffs in relations with external constituencies and Cliffs' employees. Directors must refer direct inquiries from external constituencies or employees to the Chair and/or the Lead Director, as appropriate. The Chair and the Lead Director will report to the Board any requests from external constituencies or employees to meet with the Board or any group of Directors.

Confidentiality: The proceedings and deliberations of the Board and Committees are confidential. Each Director will maintain the confidentiality of information received in connection with his or her service as a Director.

November 18, 2014



Secretary

Annex A

[Intentionally Omitted]

Annex B

Form of Resignation on Failure to Obtain Majority Vote

To the Chair of the Board of Directors and the Secretary of Cliffs Natural Resources Inc. ("Cliffs"):

I hereby irrevocably tender my resignation as a Director of Cliffs, which resignation will become effective only upon the occurrence of the following two conditions: (1) I fail, upon nomination to be reelected as a Director of Cliffs, to receive the vote of the majority of the votes cast by shareholders at a meeting for the election of Directors at which a quorum is present, so long as the number of nominees does not exceed the number of directors to be elected; and (2) thereafter, the Board of Directors of Cliffs accepts my resignation as a Director.

This resignation will not be applicable with respect to any election of directors by the shareholders of Cliffs where the number of nominees exceeds the number of directors to be elected.

For purposes of this letter, a majority of votes cast shall mean that the number of shares voted "for" my election exceeds 50% of the number of votes cast with respect to my election, and "votes cast" includes votes "for" my election plus votes to withhold authority with respect to my election and excludes abstentions and broker non-votes with respect to my election.

In the event that I fail to receive the required number of votes for reelection, I agree to provide any information reasonably requested by the Governance and Nominating Committee and by the Board of Directors, and I will abstain from otherwise participating in the decision of the Governance and Nominating Committee and of the Board of Directors relating to my resignation.