



Security Class
COMMON SHARES
Holder Account Number

Fold

Form of Proxy - Annual General Meeting to be held on November 9, 2017

This Form of Proxy is solicited by and on behalf of Management.

Notes to proxy

1. Every holder has the right to appoint some other person or company of their choice, who need not be a holder, to attend and act on their behalf at the meeting or any adjournment or postponement thereof. If you wish to appoint a person or company other than the persons whose names are printed herein, please insert the name of your chosen proxyholder in the space provided (see reverse).
2. If the securities are registered in the name of more than one owner (for example, joint ownership, trustees, executors, etc.), then all those registered should sign this proxy. If you are voting on behalf of a corporation or another individual you must sign this proxy with signing capacity stated, and you may be required to provide documentation evidencing your power to sign this proxy.
3. This proxy should be signed in the exact manner as the name(s) appear(s) on the proxy.
4. If this proxy is not dated, it will be deemed to bear the date on which it is mailed by Management to the holder.
5. **The securities represented by this proxy will be voted as directed by the holder, however, if such a direction is not made in respect of any matter, this proxy will be voted as recommended by Management.**
6. The securities represented by this proxy will be voted in favour or withheld from voting or voted against each of the matters described herein, as applicable, in accordance with the instructions of the holder, on any ballot that may be called for and, if the holder has specified a choice with respect to any matter to be acted on, the securities will be voted accordingly.
7. This proxy confers discretionary authority in respect of amendments or variations to matters identified in the Notice of Meeting or other matters that may properly come before the meeting or any adjournment or postponement thereof.
8. This proxy should be read in conjunction with the accompanying documentation provided by Management.

Fold

Proxies submitted must be received by 10:00 AM, Mountain Time, on November 7, 2017.

VOTE USING THE TELEPHONE OR INTERNET 24 HOURS A DAY 7 DAYS A WEEK!



To Vote Using the Telephone

- Call the number listed BELOW from a touch tone telephone.

1-866-732-VOTE (8683) Toll Free



To Vote Using the Internet

- Go to the following web site:
www.investorvote.com
- **Smartphone?**
Scan the QR code to vote now.



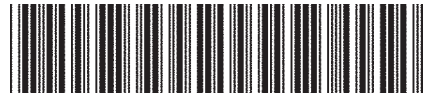
If you vote by telephone or the Internet, DO NOT mail back this proxy.

Voting by mail may be the only method for securities held in the name of a corporation or securities being voted on behalf of another individual.

Voting by mail or by Internet are the only methods by which a holder may appoint a person as proxyholder other than the Management nominees named on the reverse of this proxy. Instead of mailing this proxy, you may choose one of the two voting methods outlined above to vote this proxy.

To vote by telephone or the Internet, you will need to provide your CONTROL NUMBER listed below.

CONTROL NUMBER



Appointment of Proxyholder

I/We being holder(s) of Niocorp Developments Ltd. hereby appoint:

Mark A. Smith, President, Chief Executive Officer and Executive Chairman of the Company, or failing him, John F. Ashburn, Jr., Vice-President, General Counsel and Corporate Secretary of the Company,

OR

Print the name of the person you are appointing if this person is someone other than the Chairman of the Meeting.

as my/our proxyholder with full power of substitution and to attend, act and to vote for and on behalf of the shareholder in accordance with the following direction (or if no directions have been given, as the proxyholder sees fit) and all other matters that may properly come before the Annual General Meeting of shareholders of Niocorp Developments Ltd. to be held at 7800 E Tufts Ave., Denver, CO, 80237, on November 9, 2017 at 10:00 AM, Mountain Time, and at any adjournment or postponement thereof.

VOTING RECOMMENDATIONS ARE INDICATED BY **HIGHLIGHTED TEXT** OVER THE BOXES.

For **Against** **Abstain**

1. Number of Directors

To set the number of Directors at six.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

2. Election of Directors

To elect the following nominees as Directors:

	For	Withhold		For	Withhold		For	Withhold
01. Mark A. Smith	<input type="checkbox"/>	<input type="checkbox"/>	02. Joseph A. Carrabba	<input type="checkbox"/>	<input type="checkbox"/>	03. Michael Morris	<input type="checkbox"/>	<input type="checkbox"/>
04. David C. Beling	<input type="checkbox"/>	<input type="checkbox"/>	05. Anna Castner-Wightman	<input type="checkbox"/>	<input type="checkbox"/>	06. Nilsa Guerrero-Mahon	<input type="checkbox"/>	<input type="checkbox"/>

For **Withhold**

3. Appointment of Auditors

To appoint BDO USA, LLP Certified Public Accountants as Auditors of the Company for the ensuing year and authorize the Directors to fix their remuneration.

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

4. Long-Term Incentive Plan

To pass the following resolution:

BE IT RESOLVED AS AN ORDINARY RESOLUTION THAT:

1. The Long-Term Incentive Plan, substantially as described in and appended to the Company's Information Circular in respect of the Company's 2017 Annual General Meeting of Shareholders (the "Meeting"), is hereby authorized and approved to be effective from the date of the Meeting.
2. All unallocated entitlements under the Long-Term Incentive Plan, as amended from time to time, be and are hereby approved and authorized, and the Company shall be permitted to grant awards thereunder until November 9, 2020.
3. Any one director or officer of the Company be and is hereby authorized and directed to do all such acts and things and to execute and deliver all such documents, instruments and assurances as in the opinion of such director or officer may be necessary or desirable to give effect to the foregoing resolutions.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------

Authorized Signature(s) - This section must be completed for your instructions to be executed.

I/We authorize you to act in accordance with my/our instructions set out above. I/We hereby revoke any proxy previously given with respect to the Meeting. **If no voting instructions are indicated above, this Proxy will be voted as recommended by Management.**

Signature(s)

Date

MM / DD / YY

Interim Financial Statements – Mark this box if you would like to receive Interim Financial Statements and accompanying Management's Discussion and Analysis by mail.

Annual Financial Statements – Mark this box if you would like to receive the Annual Financial Statements and accompanying Management's Discussion and Analysis by mail.

If you are not mailing back your proxy, you may register online to receive the above financial report(s) by mail at www.computershare.com/maillinglist.