

**GOLDEN STAR RESOURCES LTD.
ANNUAL GENERAL AND SPECIAL MEETING OF SHAREHOLDERS - MAY 4, 2017
PROXY**

Important Notice Regarding the Availability of Proxy Materials for the Annual General and Special Meeting of Common Shareholders of Golden Star Resources Ltd. to be held on Thursday, May 4, 2017

The Management Information Circular and 2016 Annual Report to Shareholders are available at <http://www.gsr.com/noticeandaccess>

THIS PROXY IS SOLICITED BY MANAGEMENT OF THE CORPORATION

The undersigned holder of common shares of Golden Star Resources Ltd. (the “**Corporation**”) hereby nominates and appoints Samuel Coetzer, President and Chief Executive Officer of the Corporation, or failing him, Jason Brooks, Vice President and Controller of the Corporation, or instead of any of them, _____, as the proxy of the undersigned to attend, act and vote in respect of all common shares of the Corporation registered in the name of the undersigned at the Annual General and Special Meeting (the “**Meeting**”) of shareholders of the Corporation to be held at 11:30 a.m. (Toronto time) on Thursday, May 4, 2017 in the Huron/Escarpment Boardrooms at the offices of Fasken Martineau DuMoulin LLP, 333 Bay Street, Suite 2400, Bay Adelaide Centre, Toronto, Ontario, Canada, M5H 2T6 and at any and all adjournments thereof.

1. To elect the following persons as directors of the Corporation:

- | | | | | |
|------------------------|-----|-----|----------|-----|
| 1.1. Timothy C. Baker | For | ___ | Withhold | ___ |
| 1.2. Gilmour Clausen | For | ___ | Withhold | ___ |
| 1.3. Samuel T. Coetzer | For | ___ | Withhold | ___ |
| 1.4. Anu Dhir | For | ___ | Withhold | ___ |
| 1.5. Robert E. Doyle | For | ___ | Withhold | ___ |
| 1.6. Daniel Owiredo | For | ___ | Withhold | ___ |
| 1.7. Craig J. Nelsen | For | ___ | Withhold | ___ |
| 1.8. Mona Quartey | For | ___ | Withhold | ___ |

2. To re-appoint PricewaterhouseCoopers LLP as the auditor of the Corporation and to authorize the Audit Committee to fix the auditor’s remuneration:

For _____ Withhold _____

3. To pass the Advisory Vote on Named Executive Officer Compensation Resolution (as defined in the management information circular of the Corporation dated March 13, 2017 (the “Management Information Circular”)):

For _____ Against _____

4. To pass the 2017 PRSU Plan Resolution (as defined in the Management Information Circular):

For _____ Against _____

The undersigned hereby revokes any instrument of proxy heretofore given with reference to the said Meeting or any adjournment thereof.

The proxy holder may in his or her discretion vote with respect to amendments or variations to matters identified in the Notice of Meeting (as defined in the accompanying Management Information Circular) or to other matters which may properly come before the Meeting or any adjournment thereof.

DATED this _____ day of _____, 2017.

Signature

Name of shareholder (Please Print)

Address

Number of common shares held

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 **NOT** like to receive annual financial statements and accompanying management’s discussion and analysis by mail.

NOTES:

1. The common shares represented by this proxy will be voted in accordance with the instructions given herein. **IF NO CHOICE IS SPECIFIED HEREIN, OR IF ANY INSTRUCTIONS GIVEN ARE NOT CLEAR, THE COMMON SHARES SHALL BE VOTED AS IF THE SHAREHOLDER HAD SPECIFIED AN AFFIRMATIVE VOTE, ALL IN THE SAME MANNER AND TO THE SAME EXTENT AS THE SHAREHOLDER COULD DO IF THE SHAREHOLDER WERE PERSONALLY PRESENT AT THE MEETING.**
2. **A SHAREHOLDER HAS THE RIGHT TO APPOINT A PERSON (WHO NEED NOT BE A SHAREHOLDER) OTHER THAN THE PERSON DESIGNATED IN THIS PROXY TO ATTEND AND ACT FOR THE SHAREHOLDER AND ON THE SHAREHOLDER'S BEHALF AT THE MEETING.** Such right may be exercised by printing in the space provided the name of the person to be appointed and striking the name of the management designees named above, in which case only the person so named may vote the common shares at the Meeting.
3. This proxy will not be valid unless it is dated and signed by the shareholder or the shareholder's attorney authorized in writing or, if the shareholder is a corporation, by a duly authorized officer or attorney of the corporation, and ceases to be valid one year from its date. If the proxy is executed by an attorney for an individual shareholder or by an officer or an attorney of a corporate shareholder, the instrument so empowering the officer or attorney, as the case may be, or a notarial copy thereof, must accompany the proxy instrument.
4. If this proxy is not dated in the space provided, it is deemed to bear the date on which it is mailed by the management of the Corporation.
5. To be effective, the instrument of proxy must be received by 5:00 p.m. (Toronto time) on Wednesday, May 3, 2017 at the address set forth in the accompanying return envelope which will be either: (i) Attention: CST Trust Company, P.O. Box 721, Agincourt, Ontario, Canada M1S 0A1 (in the case of common shares which are registered on the books of the Corporation for trading on the Toronto Stock Exchange or on the NYSE MKT); or (ii) Attention: The Registrar, Ghana Commercial Bank Limited, Share Registry, Head Office, P.O. Box 134, Accra, Ghana (in the case of common shares which are registered on the books of the Corporation for trading on the Ghana Stock Exchange).