

ORVANA MINERALS CORP.

TRADING GUIDELINES

ADOPTED BY THE BOARD OF DIRECTORS

JUNE 30, 2005

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1. INTRODUCTION

Orvana Minerals Corp. is a publicly-traded Canadian company whose common shares are listed on the Toronto Stock Exchange. References to “**Orvana**” or the “**Company**” in these guidelines (“**Guidelines**”) include Orvana Minerals Corp. and all of its subsidiary companies including, without limitation, OroValle Minerals S.L. (“**OroValle**”) and Empresa Minera Paititi S.A. (“**EMIPA**”).

As a Canadian public company, Orvana is subject to applicable Canadian securities laws. One of the main principles underlying the regulation of trading in securities is the effort to preserve confidence in the fairness and integrity of the securities market. Applicable securities laws seek to ensure that all persons investing in securities of a publicly traded company such as Orvana have equal access to information about such company that may affect their investment decisions. Accordingly, these laws require prompt disclosure of material information about the business of a company and prohibit trading in securities of a company by persons in possession of undisclosed material information about the company and the disclosure of such information to third parties before it is generally disclosed.

Directors, officers, employees and contract workers of Orvana are required to comply with Canadian securities laws in connection with any purchase or sale of common shares or other securities of Orvana.

These Guidelines describe certain provisions of applicable Canadian securities laws relating to trading in securities of Orvana and outline certain guidelines related to this subject that have been adopted by the board of directors of Orvana. In particular, these Guidelines discuss “insider trading” and “tipping” prohibitions, describe certain time periods during which directors, officers and employees of Orvana shall not trade securities of Orvana and the requirements related to the reporting of trades in the securities of Orvana by its reporting insiders.

2. APPLICATION

A. **Persons that are Subject to these Guidelines**

The following persons are required to observe and comply with these Guidelines insofar as its provisions apply to them:

- (a) all directors, officers and employees of the Company or any of its subsidiaries;
- (b) any family member or other person living in the household or a dependant child of any of the individuals referred to in subsection 2.A.(a) above; and
- (c) partnerships, trusts, corporations, R.S.P.s and similar entities over which any of the above-mentioned individuals exercise control or direction.

B. **Trades that are Subject to these Guidelines**

Under these Guidelines, all references to trading in securities of the Company include:

- (a) any sale or purchase of securities of the Company including the exercise of stock options granted under the Company’s stock option plan and the acquisition of shares or any other securities pursuant to any Company benefit plan or arrangement (other than pursuant to the vesting of share-based compensation arrangements or an automatic securities purchase plan, where Company personnel do not control the acquisition), and

- (b) any derivatives-based or other transaction or arrangement that would be required to be reported by insiders in accordance with applicable laws or regulations relating to derivatives or equity monetization transactions.

3. UNDISCLOSED MATERIAL INFORMATION

“Undisclosed material information” means:

- a change in the business, operations or capital of the Company that would reasonably be expected to have a significant effect on the market price or value of the securities of the Company (which includes any decision to implement such a change by the Board of Directors or by senior management who believe that confirmation of the decision by the Board of Directors is probable);
- a fact that significantly affects, or would reasonably be expected to have a significant effect on, the market price or value of the securities of the Company; or
- any information which is not generally available to the public that a reasonable investor would be likely to consider important in deciding whether to buy, hold or sell securities of the Company,

in each case, which has not been generally disclosed. Examples of types of information that may constitute material information are set out in Schedule “A”.

It is the responsibility of any Company personnel contemplating a trade in securities of the Company to determine prior to such trade whether he or she is aware of any information that constitutes undisclosed material information. If in doubt, the individual should consult with the Chief Executive Officer or the Chief Financial Officer (either such person being referred to herein as a “Responsible Officer”).

In addition, section 4(C) of these Guidelines requires that certain Company personnel pre-clear trades in securities of the Company.

4. INSIDER TRADING AND TIPPING

A. Introduction

Under applicable securities laws it is prohibited for a person to trade securities of a public company while the person has knowledge of undisclosed material information about the company.

Both civil and criminal liability may be imposed on directors, officers and employees of Orvana who purchase or sell securities of Orvana with knowledge of undisclosed material information (known as “insider trading”) or who inform, other than in the necessary course of business, another person or company of undisclosed material information (often referred to as “tipping”). In some circumstances, directors, officers and employees may also be found to be in violation of securities laws if they purchase or sell securities of another entity with knowledge of a material fact or material change concerning a transaction involving the Company and that other entity, or disclose such information to another person other than in the necessary course of business.

The penalties for failure to comply with applicable laws include a fine of not less than the profit made on the trade and not more than the greater of \$5,000,000 and an amount to equal to four times the profit made on the trade, as well as a jail term of up to 10 years. Civil liability includes a requirement to compensate the other party to the trade for damages and liability to Orvana itself for any benefit or advantage received or receivable by the director, officer or employee as a result of the transaction.

The prohibition against trading with knowledge of undisclosed material information is very far reaching and does not require that the person actually make use of such information when trading. It is enough that the person is found to have traded while in possession of such information. As it is not always clear whether something is a material fact or a material change, a person trading in the Company's securities may sometimes, with the benefit of hindsight, be found to have executed a trade while in possession of undisclosed material information. In addition, it may also be difficult for a person to prove that, as a director, officer or employee, he was unaware of the existence of certain information. Applicable securities laws specifically permit a trade where the person or company reasonably believed that the other party to the purchase or sale had knowledge of the material fact or material change. This may permit the exercise of outstanding options issued by the Company in respect of treasury securities, but resale of the underlying securities may be prohibited while the director, officer or employee has knowledge of undisclosed material information.

You can appreciate that if trading or tipping did take place by directors, officers or employees in violation of applicable securities laws, in addition to the penalties described above it would be most embarrassing to both the person involved and to Orvana. Therefore, the Board of Directors has adopted the following guidelines as to when directors, officers and employees may purchase or sell securities of the Company and has adopted guidelines to prevent tipping.

B. Guidelines Regarding Trading by Directors, Officers and Employees

- (a) Under no circumstances may directors, officers or employees trade the Company's securities if they are aware of any undisclosed material information.
- (b) Directors, officers, management and certain other designated employees of the Company (the "**Blacked-Out Personnel**") may not buy or sell securities of the Company during the period beginning immediately following the end of a fiscal quarter and ending at a time which is the equivalent of one full business day after the public release of the Company's quarterly and annual results (the "**Blackout Period**"). For example, if results were publicly announced at 1:00 p.m. on Tuesday, trading would be permitted after 1:00 p.m. on Wednesday. If results were announced at 5:00 p.m. on Tuesday, trading would not be permitted until Thursday morning. The Corporate Secretary of the Company shall maintain a list of the Blacked-Out Personnel which shall be reviewed with the Responsible Officers prior to the release of a reminder in respect of the Blackout Period.
- (c) If the Company issues a press release disclosing material information during a period in which directors, officers or employees may ordinarily trade, directors, officers and employees are prohibited from buying or selling the Company's securities for a period equivalent to one full business day following the time of the release.
- (d) Management may impose additional trading prohibitions from time to time if circumstances warrant. For example, a trading prohibition may be considered if material developments have occurred or discoveries have been made on one of the Company's mineral projects or properties or if the Company is engaged in discussions concerning pending transactions which have progressed to a point where it reasonably could be expected that the market price of the Company's shares would be affected if the status of the transaction were disclosed. It is expected that the scope and nature of such a trading prohibition will be communicated to affected directors, officers and employees at the applicable times.
- (e) Directors, officers and employees may not sell "short" or sell a "call option" on any securities of the Company or purchase a "put option" where they do not own the underlying securities.

- (f) To avoid possible inadvertent conflict with this policy, standing sell orders or standing purchase orders should not be left with a broker.
- (g) Notwithstanding the foregoing restrictions, in the event that options held by a director or officer are scheduled to expire during a period in which such director or officer is prohibited from trading in the Company's securities pursuant to this Section 4.B, then such director or officer shall be entitled to exercise his options, provided that he is not aware of any material undisclosed information regarding the Company which is not also known to the Company. Although such a director or officer shall be permitted to exercise his options under such circumstances, any other trade by him, including without limitation a sale of the common shares acquired pursuant to the exercise of the options, shall be subject to the restrictions contained in this Section 4.B.
- (h) If the Board of Directors wishes to grant options to purchase common shares of the Company during a Blackout Period, such options shall be priced in accordance with the Company's Stock Option Plan based on a period commencing immediately after the expiry of the Blackout Period.

C. Trading Pre-Clearance

To assist those individuals who are directors or officers of the Company, as well as any other senior personnel who may be designated by the Compensation, Nominating and Corporate Governance Committee of the Board of Directors from time to time (which other personnel shall be listed from time to time in Schedule "B") in avoiding undertaking any trade in securities of the Company that may contravene or be perceived to contravene applicable securities laws, these individuals are required to notify, in advance, a Responsible Officer of any proposed trade of securities of the Company in order to confirm that there is no material information that has not been generally disclosed. Any such person shall notify a Responsible Officer not more than one business day before the date of the proposed transaction either orally or by email. Prior to the date of the proposed transaction, the Responsible Officer who has received such a notification shall advise such person as to whether the proposed trade may be undertaken.

D. Guidelines to Prevent Tipping

Company personnel are prohibited from communicating undisclosed material information to any person outside the Company, unless: (a) disclosure is in the necessary course of the Company's business and the disclosure is made pursuant to the proper performance by such Company personnel of his or her duties on behalf of the Company; (b) disclosure is compelled by judicial process; or (c) disclosure is expressly authorized by the Responsible Officers. Where Company personnel anticipate communicating undisclosed material information to any person outside the Company, they should consider whether it is appropriate to require that the person receiving such information first enters into a confidentiality agreement in favour of the Company (which should contain, among other things, an acknowledgement by the recipient of the requirements of applicable securities laws relating to such recipient trading securities with knowledge of a material fact or material change in respect of the Company that has not been generally disclosed and to such recipient disclosing information to another person or company such material fact or material change).

Subject to the above, undisclosed material information is to be kept strictly confidential by all Company personnel until after it has been generally disclosed. Discussing undisclosed material information within the hearing of, or leaving it exposed to, any person who has no need to know is to be avoided at all times. Company personnel with knowledge of undisclosed material information shall not encourage any other person or company to trade in the securities of the Company, regardless of whether the undisclosed material information is specifically communicated to such person or company.

If any Company personnel has any doubt with respect to whether any information is undisclosed material information or whether disclosure of undisclosed material information is in the necessary course of business, the individual is required to contact a Responsible Officer.

5. INSIDER REPORTING BY REPORTING INSIDERS

A. Reporting Requirements

The directors, certain officers and certain other employees of the Company are “**Reporting Insiders**” (as such term is defined in National Instrument 55-104 – *Insider Reporting Requirements and Exemptions*) under applicable securities laws. The individuals who are “Reporting Insiders” for these purposes are discussed below under “B. Definition of Reporting Insider”.

Reporting Insiders are required to file reports of any direct or indirect beneficial ownership of, or control or direction over, securities of the Company and of any change in such ownership, control or direction, with Canadian provincial securities regulators pursuant to the System for Electronic Disclosure by Insiders (SEDI) at www.sedi.ca. In addition, Reporting Insiders must also include in their reports any monetization, non-recourse loan or similar arrangement, trade or transaction that changes the Reporting Insider’s economic exposure to or interest in securities of the Company and which may not necessarily involve a sale, whether or not required under applicable law.

A person’s obligation to file an insider report is triggered when the person first becomes a Reporting Insider. The Reporting Insider is required to make an initial report disclosing holdings of securities of the Company within ten days of the date of becoming a Reporting Insider. There is no obligation to file an initial report if a Reporting Insider does not, at the time of becoming a Reporting Insider, beneficially own or exercise control or direction over, any of the Company’s securities.

An obligation to report is also triggered by any change in or transfer of beneficial ownership or control or direction over securities of the Company as this requires the filing of a change report. A change report must be filed within five days of any change in ownership or control or direction.

Reporting Insiders are required to update their insider profile on SEDI (i) if there is a change in the Reporting Insider’s name, his/her relationship to the Company, or if he/she ceases to be a Reporting Insider, within ten days of the event, or (ii) if there has been any other change to the insider profile, at the next time of filing an insider report or amended insider profile.

It is the ultimate responsibility of each Reporting Insider (and not the Company) to comply with these reporting requirements and applicable securities laws, and Reporting Insiders are required to provide a Responsible Officer with a copy of any insider report completed by the Reporting Insider following the filing. The Company will assist any Reporting Insider in the preparation and filing of insider reports upon request.

Some officers of the Company may be eligible to be exempted by applicable securities law from the requirements to file insider reports. A person that is uncertain as to whether he or she may be eligible to be exempted from these requirements should contact a Responsible Officer. Reporting Insiders who are exempted from these requirements remain subject to all of the other provisions of applicable securities law and these Guidelines.

B. Definition of Reporting Insider

A Reporting Insider is generally defined to include: (a) the chief executive officer, chief financial officer or chief operating officer of the reporting issuer, of a significant shareholder of the reporting issuer or of a

major subsidiary of the reporting issuer; (b) a director of the reporting issuer, of a significant shareholder of the reporting issuer or of a major subsidiary of a reporting issuer; (c) a person or company responsible for a principal business unit, division or function of the reporting issuer; (d) a significant shareholder of the reporting issuer; (e) an individual performing functions similar to the functions performed by any of the insiders described in paragraphs (a) to (d) above; and (f) any other insider that (i) in the ordinary course of business receives or has access to material information concerning the reporting issuer before that information is generally disclosed, and (ii) directly or indirectly exercises, or has the ability to exercise, significant power or influence over the business, operations, capital or development of the reporting issuer. For the purpose of the definition of Reporting Insider, a major subsidiary means a subsidiary of the reporting issuer representing 30 percent or more of the reporting issuer's consolidated assets or revenues. The Corporate Secretary shall maintain a list of the Reporting Insiders and shall advise each Reporting Insider that he or she is a Reporting Insider under these Guidelines.

6. EFFECTIVE DATE

These Guidelines were originally effective as of June 30, 2005 and have been amended from time to time and reconfirmed by the Board of Directors of Orvana most recently on May 8, 2018.

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If you have any questions in connection with these Guidelines, please contact the Chief Executive Officer or the Chief Financial Officer.

SCHEDULE "A"

Common Examples of Material Information

The following examples are not exhaustive.

- proposed changes in capital structure including stock splits and stock dividends
- proposed or pending financings
- material increases or decreases in the amount of outstanding securities or indebtedness
- proposed changes in corporate structure including amalgamations and reorganizations
- proposed acquisitions of other companies including take-over bids or mergers
- material acquisitions or dispositions of assets
- material changes or developments which would materially affect earnings upwards or downwards
- material changes in the business of the Company
- changes in senior management or control of the Company
- bankruptcy or receivership
- changes in the Company's auditors
- the financial condition and results of operations of the Company
- changes in revenues or earnings upwards or downwards
- material legal proceedings
- defaults in material obligations
- the results of the submission of matters to a vote of securityholders
- transactions with directors, officers or principal securityholders
- the granting of options or payment of other compensation to directors or officers

SCHEDULE "B"

List of Specified Personnel

All directors of Orvana Minerals Corp.
All officers of Orvana Minerals Corp.
Country manager of OroValle
Director of Finance of OroValle
Controller of OroValle
All directors and officers of OroValle
Country manager of EMIPA
Director of Finance of EMIPA
Controller of EMIPA
All directors and officers of EMIPA