

SECURITIES AND EXCHANGE COMMISSION

FORM 6-K

Current report of foreign issuer pursuant to Rules 13a-16 and 15d-16 Amendments

Filing Date: **2024-04-26** | Period of Report: **2024-04-24**
SEC Accession No. [0001477932-24-002335](#)

([HTML Version](#) on [secdatabase.com](#))

FILER

TANTECH HOLDINGS LTD

CIK: **1588084** | IRS No.: **000000000** | State of Incorpor.: **D8** | Fiscal Year End: **1231**
Type: **6-K** | Act: **34** | File No.: **001-36885** | Film No.: **24878350**
SIC: **2860** Industrial organic chemicals

Mailing Address
NO. 10 CEN SHAN RD,
SHUIGE INDTRL ZONE
LISHUI CITY
ZHEJIANG F4 323000

Business Address
NO. 10 CEN SHAN RD,
SHUIGE INDTRL ZONE
LISHUI CITY
ZHEJIANG F4 323000
86 578 226 2309

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of April 2024

Commission File Number: **001-36885**

TANTECH HOLDINGS LTD

(Translation of registrant's name into English)

**c/o Tantech Holdings (Lishui) Co., Ltd.
No. 10 Cen Shan Road, Shuige Industrial Zone
Lishui City, Zhejiang Province 323000
+86-578-226-2305**

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Explanatory Note:

On April 22, 2024, Tantech Holdings Ltd (the "Company") entered into a private placement transaction (the "Private Placement"), pursuant to a Securities Purchase Agreement (the "Agreement") with certain institutional investors (the "Purchasers") for aggregate gross proceeds of approximately \$2.1 million, before deducting fees to the placement agent and other expenses payable by the Company in connection with the Private Placement. Maxim Group LLC ("Maxim") acted as the exclusive placement agent for the Private Placement. The Company intends to use the net proceeds from the Private Placement for working capital and general corporate purposes.

As part of the Private Placement, the Company will issue an aggregate of 4,200,000 units and pre-funded units (collectively, the "Units") at a purchase price of \$0.50 per unit (less \$0.0001 per pre-funded unit). Each Unit consists of (i) one Common Share of the Company (or one pre-funded warrant to purchase one Common Share (the "Pre-Funded Warrant")), (ii) two Series A warrants each to purchase one Common Shares (the "Series A Warrants") and (iii) one Series B warrant to purchase such amount of Common Shares as determined on the Reset Date (defined below) and in accordance with the terms therein (the "Series B Warrant" and together with the Series A Warrant, the "Warrants").

The Pre-Funded Warrants will be immediately exercisable at an exercise price of \$0.0001 per Common Share and will not expire until exercised in full. The Series A Warrants will be exercisable upon issuance, will have an exercise price of \$0.75 per Common Share (subject to certain anti-dilution and share combination event protections) and will have a term of 5.5 years from the date of issuance. The Series B Warrants will be exercisable following the Reset Date, will have an exercise price of \$0.0001 per Common Share and will have a term of 5.5 years from the date of issuance. The exercise price and number of Common Shares issuable under the Series A Warrants are subject to adjustment and the

number of Common Shares issuable under the Series B Warrant will be determined following the earliest to occur of: (i) the date on which a resale registration statement covering the resale of all Registrable Securities (as defined in the Series B Warrant) has been declared effective for 11 consecutive trading days, (ii) the date on which the Purchasers may sell the Registrable Securities pursuant to Rule 144 under the Securities Act of 1933, as amended (the “Act”) for a period of 11 consecutive trading days, and (iii) twelve months and 30 days following the issuance date of the Series B Warrants (the “Reset Date”) to be determined pursuant to the lowest daily average trading price of the Common Shares during a period of 10 trading days, subject to a pricing floor of \$0.137 per Common Share, such that the maximum number of Common Shares underlying the Series A Warrants and Series B Warrants would be an aggregate of approximately 8,400,000 shares and 11,128,470 shares, respectively. The Company has undertaken to file a resale registration statement covering all of the Registrable Securities on behalf the Purchasers pursuant to a Registration Rights Agreement (the “Registration Rights Agreement”) also entered into with the Purchasers in connection with the Private Placement.

The Company also entered into a placement agent agreement (the “Placement Agent Agreement”) with Maxim, dated April 22, 2024, pursuant to which Maxim agreed to serve as the exclusive placement agent for the Company in connection with the Private Placement. The Company agreed to pay Maxim a cash placement fee equal to 7.50% of the gross cash proceeds received in the Private Placement and to pay for expenses of Maxim’s legal counsel up to an aggregate amount of \$50,000.

The securities described herein (the “Securities”) have not been registered under the Act, and may not be sold in the United States absent registration or an applicable exemption from the registration requirements of the Act. Pursuant to the Registration Rights Agreement, the Company has agreed to file a registration statement with the Securities and Exchange Commission (the “SEC”) to register the resale of the Common Shares and the Common Shares underlying the Warrants and the Pre-Funded Warrants.

This Report of Foreign Private Issuer on Form 6-K shall not constitute an offer to sell or the solicitation of an offer to buy the Securities, nor shall there be any sale of these Securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

The descriptions of the Agreement, the Registration Rights Agreement, the Placement Agent Agreement, the Series A Warrant, the Series B Warrant and the Pre-Funded Warrant set forth above are qualified in their entirety by reference to the full text of those documents, which are attached hereto as Exhibits 10.1, 10.2, 10.3, 4.1, 4.2 and 4.3, respectively.

Cautionary Note Regarding Forward-Looking Statements

This Report of Foreign Private Issuer on Form 6-K contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act and other securities laws. Words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates” and similar expressions or variations of such words are intended to identify forward-looking statements. For example, the Company is using forward-looking statements when it discusses the closing of the Private Placement and anticipated use of proceeds from the Private Placement. Forward-looking statements are not historical facts, and are based upon management’s current expectations, beliefs and projections, many of which, by their nature, are inherently uncertain. Such expectations, beliefs and projections are expressed in good faith. However, there can be no assurance that management’s expectations, beliefs or projections will be achieved, and actual results may differ materially from what is expressed in, or indicated by, the forward-looking statements. Forward-looking statements are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the forward-looking statements. For a more detailed description of the risks and uncertainties affecting the Company, reference is made to the Company’s reports filed from time to time with the SEC. Forward-looking statements speak only as of the date the statements are made. The Company assumes no obligation to update forward-looking statements to reflect actual results, subsequent events or circumstances, changes in assumptions or changes in other factors affecting forward-looking information except to the extent required by applicable securities laws. If the Company does update one or more forward-looking statements, no inference should be drawn that the Company will make additional updates with respect thereto or with respect to other forward-looking statements.

Exhibit Index

Exhibit

Number	Description of Exhibit
4.1	Form of Series A Warrant
4.2	Form of Series B Warrant
4.3	Form of Pre-Funded Warrant
10.1	Form of Securities Purchase Agreement
10.2	Form of Registration Rights Agreement
10.3	Placement Agent Agreement
99.1	Press release dated April 22, 2024, titled “Tantech Holdings Ltd Announces \$2.1 Million Private Placement”

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Tantech Holdings Ltd

Date: April 25, 2024

By: /s/ Wangfeng Yan

Wangfeng Yan
Chief Executive Officer

[FORM OF SERIES A WARRANT]

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

TANTECH HOLDINGS LTD

Series A Warrant To Purchase Common Shares

Warrant No.: _____

Number of Common Shares: _____

Date of Issuance: [____], 2024 (“**Issuance Date**”)

Tantech Holdings Ltd, a British Virgin Islands business company (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [HOLDER], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after the date hereof, but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), _____ (_____) fully paid nonassessable Common Shares, subject to adjustment as provided herein (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Shares (including any Warrants to Purchase Common Shares issued in exchange, transfer or replacement hereof, this “**Warrant**”), shall have the meanings set forth in Section 17. This Warrant is one of the Series A Warrants to purchase Common Shares (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of [●], 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein (the “**Securities Purchase Agreement**”). Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Securities Purchase Agreement.

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery (whether via email or otherwise) of a written notice, in the form attached hereto as Exhibit A (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company in the Exercise Notice that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. On or before the first (1st) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by electronic mail an acknowledgment of

confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"). On or before the earlier of (i) the second (2nd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, in each case, following the date on which the Holder delivers the Exercise Notice to the Company, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Exercise Price has not been delivered by such date and the Holder has indicated in the Exercise Notice that the Holder is exercising the Warrant for cash, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program and (A) the Warrant Shares are subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would be available for resale of the Warrant Shares by the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program or (A) the Warrant Shares are not subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would not be available for resale of the Warrant Shares by the Holder, deliver to the Holder, book entry statements evidencing the Warrant Shares, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the book entry statements evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company's obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination.

- 2 -

(b) Exercise Price. For purposes of this Warrant, "**Exercise Price**" means \$0.75 per share, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the Weighted Average Price of the Common Shares on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the third Trading Day after the Share Delivery Date) for each Trading Day after such Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. Additionally, if the Company shall fail to cause the Transfer Agent to transmit to the Holder on or prior to the Share Delivery Date, Warrant Shares pursuant to an exercise notice delivered by the Holder and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, Common Shares to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "**Buy-In**"), then the Company shall, within three (3) Trading Days after the Holder's request, (a) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Common Shares so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such

purchase obligation was executed, and (b) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Common Shares that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Shares having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of Common Shares with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (a) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Common Shares upon the exercise of this Warrant as required pursuant to the terms hereof.

- 3 -

(d) Cashless Exercise. Notwithstanding anything contained herein to the contrary, if the Registration Statement covering the resale of the Warrant Shares is not available for the resale of such Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of Common Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A=the total number of shares with respect to which this Warrant is then being exercised if such exercise were by means of a cash exercise rather than a Cashless Exercise.

B=as applicable: (i) the Weighted Average Price of the Common Shares on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the Weighted Average Price on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the bid price of the Common Shares on the principal Trading Market as reported by Bloomberg as of the time of the Holder's execution of the applicable Exercise Notice, if such Exercise Notice is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 1(a) hereof or (iii) the Weighted Average Price of the Common Shares on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of "regular trading hours" on such Trading Day;

C=the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

If the Warrant Shares are issued pursuant to this Section 1(d), the Company hereby acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement. The Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) **Beneficial Ownership Limitations on Exercises.** Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the number of Common Shares outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of Common Shares beneficially owned by the Holder and the other Attribution Parties shall include the number of Common Shares held by the Holder and all other Attribution Parties plus the number of Common Shares issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of Common Shares which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Series B Warrants) and Pre-funded Warrants beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding Common Shares the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding Common Shares as reflected in (x) the Company’s most recent Annual Report on Form 20-F, Report on Form 6-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of Common Shares outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding Common Shares is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of Common Shares then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Trading Day confirm orally and in writing or by electronic mail to the Holder the number of Common Shares then outstanding. In any case, the number of outstanding Common Shares shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Shares to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding Common Shares (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the Common Shares issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent

necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

- 5 -

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved Common Shares to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of Common Shares equal to 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding without regard to any limitation on exercise included herein and assuming that the shares underlying this Warrant are adjusted based on a Reset Price equal to \$0.137 (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits, or other similar events occurring after the Subscription Date) (the “**Required Reserve Amount**” and the failure to have such sufficient number of authorized and unreserved Common Shares, an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized Common Shares to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, if shareholder approval is required to cure an Authorized Share Failure, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its shareholders for the approval of an increase in the number of authorized Common Shares. In connection with such meeting, the Company shall provide each shareholder with a proxy statement and shall use its best efforts to solicit its shareholders’ approval of such increase in authorized Common Shares and to cause its board of directors to recommend to the shareholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the approval of holders of a majority of the Common Shares voting at a general meeting to approve the increase in the number of authorized Common Shares, the Company may satisfy this obligation by obtaining such approval.

- 6 -

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Adjustment Upon Issuance of Common Shares. If and whenever on or after the Subscription Date, the Company grants, issues or sells (or enters into any agreement to grant, issue or sell), or in accordance with this Section 2 is deemed to have granted, issued or sold, any Common Shares (including the issuance or sale of Common Shares owned or held by or for the account of the Company, but excluding any Excluded Securities granted issued or sold or deemed to have been granted issued or sold) for a consideration per share (the “**New Issuance Price**”) less than a price equal to the Exercise Price in effect immediately prior to such granting, issuance or sale or deemed granting issuance or sale (such Exercise Price then in effect is referred to herein as the “**Applicable Price**”) (the foregoing a “**Dilutive Issuance**”), then immediately after such Dilutive Issuance, the Exercise Price then in effect shall be reduced to an amount equal to the New Issuance Price. For all purposes of the foregoing (including, without limitation, determining the adjusted Exercise Price and the New Issuance Price under this Section 2(a)), the following shall be applicable:

(i) Issuance of Options. If the Company in any manner grants, issues or sells (or enters into any agreement to grant, issue or sell) any Options and the lowest price per share for which one Common Share is at any time issuable upon the exercise of any such Option or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof is less than the Applicable Price, then such Common Share shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the granting or sale of such Option for such price per share. For purposes of this Section 2(a)(i), the “lowest price per share for which one Common Share is at any time

issuable upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to any one Common Share upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof and (y) the lowest exercise price set forth in such Option for which one Common Share is issuable (or may become issuable assuming all possible market conditions) upon the exercise of any such Options or upon conversion, exercise or exchange of any Convertible Securities issuable upon exercise of any such Option or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Option (or any other Person) upon the granting, issuance or sale of such Option, upon exercise of such Option and upon conversion, exercise or exchange of any Convertible Security issuable upon exercise of such Option or otherwise pursuant to the terms thereof plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Option (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such Common Shares or of such Convertible Securities upon the exercise of such Options or otherwise pursuant to the terms of or upon the actual issuance of such Common Shares upon conversion, exercise or exchange of such Convertible Securities.

- 7 -

(ii) Issuance of Convertible Securities. If the Company in any manner issues or sells (or enters into any agreement to issue or sell) any Convertible Securities and the lowest price per share for which one Common Share is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof is less than the Applicable Price, then such Common Share shall be deemed to be outstanding and to have been issued and sold by the Company at the time of the issuance or sale (or the time of execution of such agreement to issue or sell, as applicable) of such Convertible Securities for such price per share. For the purposes of this Section 2(a)(ii), the “lowest price per share for which one Common Share is at any time issuable upon the conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof” shall be equal to (1) the lower of (x) the sum of the lowest amounts of consideration (if any) received or receivable by the Company with respect to one Common Share upon the issuance or sale (or pursuant to the agreement to issue or sell, as applicable) of the Convertible Security and upon conversion, exercise or exchange of such Convertible Security or otherwise pursuant to the terms thereof and (y) the lowest conversion price set forth in such Convertible Security for which one Common Share is issuable (or may become issuable assuming all possible market conditions) upon conversion, exercise or exchange thereof or otherwise pursuant to the terms thereof minus (2) the sum of all amounts paid or payable to the holder of such Convertible Security (or any other Person) upon the issuance or sale (or the agreement to issue or sell, as applicable) of such Convertible Security plus the value of any other consideration received or receivable by, or benefit conferred on, the holder of such Convertible Security (or any other Person). Except as contemplated below, no further adjustment of the Exercise Price shall be made upon the actual issuance of such Common Shares upon conversion, exercise or exchange of such Convertible Securities or otherwise pursuant to the terms thereof, and if any such issuance or sale of such Convertible Securities is made upon exercise of any Options for which adjustment of this Warrant has been or is to be made pursuant to other provisions of this Section 2(a), except as contemplated below, no further adjustment of the Exercise Price shall be made by reason of such issuance or sale.

- 8 -

(iii) Change in Option Price or Rate of Conversion. If the purchase or exercise price provided for in any Options, the additional consideration, if any, payable upon the issue, conversion, exercise or exchange of any Convertible Securities, or the rate at which any Convertible Securities are convertible into or exercisable or exchangeable for Common Shares increases or decreases at any time (other than proportional changes in conversion or exercise prices, as applicable, in connection with an event referred to in Section 2(c)), the Exercise Price in effect at the time of such increase or decrease shall be adjusted to the Exercise Price

which would have been in effect at such time had such Options or Convertible Securities provided for such increased or decreased purchase price, additional consideration or increased or decreased conversion rate, as the case may be, at the time initially granted, issued or sold. For purposes of this Section 2(a)(iii), if the terms of any Option or Convertible Security (including, without limitation, any Option or Convertible Security that was outstanding as of the Subscription Date) are increased or decreased in the manner described in the immediately preceding sentence, then such Option or Convertible Security and the Common Shares deemed issuable upon exercise, conversion or exchange thereof shall be deemed to have been issued as of the date of such increase or decrease. No adjustment pursuant to this Section 2(a) shall be made if such adjustment would result in an increase of the Exercise Price then in effect.

(iv) Calculation of Consideration Received. If any Option and/or Convertible Security and/or Adjustment Right is issued in connection with the issuance or sale or deemed issuance or sale of any other securities of the Company (as determined by the Holder, the “**Primary Security**”, and such Option and/or Convertible Security and/or Adjustment Right, the “**Secondary Securities**” and together with the Primary Security, each a “**Unit**”), together comprising one integrated transaction, the aggregate consideration per Common Share with respect to such Primary Security shall be deemed to be the lower of (x) the purchase price of such Unit, (y) if such Primary Security is an Option and/or Convertible Security, the lowest price per share for which one Common Share is at any time issuable upon the exercise or conversion of the Primary Security in accordance with Sections 2(a)(i) or 2(a)(ii) above and (z) the lowest Weighted Average Price of the Common Shares of Common Stock on any Trading Day during the five (5) Trading Day period (the “**Adjustment Period**”) immediately following the public announcement of such Dilutive Issuance (for the avoidance of doubt, if such public announcement is released prior to the opening of the Principal Market on a Trading Day, such Trading Day shall be the first Trading Day in such five Trading Day period and if this Warrant is exercised, on any given Exercise Date during any such Adjustment Period, solely with respect to such portion of this Warrant converted on such applicable Exercise Date, such applicable Adjustment Period shall be deemed to have ended on, and included, the Trading Day immediately prior to such Exercise Date). If any Common Shares, Options or Convertible Securities are issued or sold for a consideration other than cash, the amount of such consideration received by the Company (for the purpose of determining the consideration paid for such Common Share, Option or Convertible Security, but not for the purpose of the calculation of the Black Scholes Consideration Value) will be the fair value of such consideration, except where such consideration consists of publicly traded securities, in which case the amount of consideration received by the Company for such securities will be the arithmetic average of the Weighted Average Prices of such security for each of the five (5) Trading Days immediately preceding the date of receipt. If any Common Shares, Options or Convertible Securities are issued to the owners of the non-surviving entity in connection with any merger in which the Company is the surviving entity, the amount of consideration therefor (for the purpose of determining the consideration paid for such Common Share, Option or Convertible Security, but not for the purpose of the calculation of the Black Scholes Consideration Value) will be deemed to be the fair value of such portion of the net assets and business of the non-surviving entity as is attributable to such Common Shares, Options or Convertible Securities (as the case may be). The fair value of any consideration other than cash or publicly traded securities will be determined jointly by the Company and the Holder. If such parties are unable to reach agreement within ten (10) days after the occurrence of an event requiring valuation (the “**Valuation Event**”), the fair value of such consideration will be determined within five (5) Trading Days after the tenth (10th) day following such Valuation Event by an independent, reputable appraiser jointly selected by the Company and the Holder. The determination of such appraiser shall be final and binding upon all parties absent manifest error and the fees and expenses of such appraiser shall be borne by the Company.

(v) Record Date. If the Company takes a record of the holders of Common Shares for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Shares, Options or in Convertible Securities or (B) to subscribe for or purchase Common Shares, Options or Convertible Securities, then such record date will be deemed to be the date of the issuance or sale of the Common Shares deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase (as the case may be).

(vi) No Readjustment. For the avoidance of doubt, in the event that following the consummation of a Dilutive Issuance and the Exercise Price has been adjusted pursuant to this Section 2(a) and the Dilutive Issuance that triggered such adjustment is unwound, cancelled or expires after the fact for any reason, the Exercise Price will not be readjusted to the Exercise Price that would have been in effect if such Dilutive Issuance had not occurred or been consummated.

(vii) Holder's Right of Alternative Exercise Price Following Issuance of Certain Options or Convertible Securities. In addition to and not in limitation of the other provisions of this Section 2, if the Company in any manner issues or sells or enters into any agreement to issue or sell, any Common Shares, Options or Convertible Securities (any such securities, "**Variable Price Securities**") after the Subscription Date that are issuable pursuant to such agreement or convertible into or exchangeable or exercisable for Common Shares at a price which varies or may vary with the market price of the Common Shares, including by way of one or more reset(s) to a fixed price, but exclusive of such formulations reflecting customary anti-dilution provisions (such as share splits, share combinations, share dividends and similar transactions) (each of the formulations for such variable price being herein referred to as, the "**Variable Price**"), the Company shall provide written notice thereof via facsimile and overnight courier to the Holder on the date of such agreement and the issuance of such Convertible Securities or Options. From and after the date the Company enters into such agreement or issues any such Variable Price Securities, the Holder shall have the right, but not the obligation, in its sole discretion to substitute the Variable Price for the Exercise Price upon exercise of this Warrant by designating in the Exercise Notice delivered upon any exercise of this Warrant that solely for purposes of such exercise the Holder is relying on the Variable Price rather than the Exercise Price then in effect. The Holder's election to rely on a Variable Price for a particular exercise of this Warrant shall not obligate the Holder to rely on a Variable Price for any future exercises of this Warrant

- 10 -

(b) Voluntary Adjustment By Company. Subject to the rules and regulations of the primary Trading Market, the Company may at any time during the term of this Warrant, with the prior written consent of the Required Holders, reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors of the Company.

(c) Adjustment Upon Subdivision or Combination of Common Shares. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding Common Shares into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding Common Shares into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant Shares will be proportionately decreased so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment. Any adjustment under this Section 2(c) shall become effective at the close of business on the date the subdivision or combination becomes effective.

(d) Reset.

(i) On a Reset Date (as such term is defined in the Series B Warrants), the Exercise Price shall be adjusted to equal the lower of (i) the Exercise Price then in effect and (ii) the Reset Price determined as of the date of determination for such Reset Date. Upon such reset of the Exercise Price pursuant to this Section 2(d), the number of Warrant Shares issuable hereunder will be proportionately increased so that after such adjustment the aggregate Exercise Price payable hereunder for the adjusted number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment (such increased number of Warrant Shares, the "**Reset Share Amount**").

(ii) Notwithstanding the foregoing, if a Holder requests to exercise this Warrant in whole or in part on any given date during the Reset Period (as such term is defined in the Series B Warrants) but prior to the Reset Date, solely with respect to such portion of this Warrant being exercised on such applicable Exercise Date, (a) such applicable Reset Date shall be deemed to mean the Exercise Date, (b) such applicable Reset Period (as such term is defined in the Series B Warrants) shall be deemed to have ended on the Trading Day immediately prior to the Exercise Date and (c) the applicable Reset Price and Reset Share Amount for such exercised Warrants shall be calculated pursuant to Section 2(d)(i). For the avoidance of doubt, following the calculation of the Reset Price and Reset Share Amount for the exercised portion of this Warrant pursuant to this Section 2(d)(ii), the Company's obligations with regard to such exercised portion of this Warrant shall be deemed satisfied and no additional Reset Price and Reset Share Amount shall apply to such exercised portion of this Warrant.

- 11 -

(ii) Partial Reset. If a portion of the Warrant Shares (but not all of the Warrant Shares) comprising the Registrable Securities have been registered for resale in the manner prescribed in clause (i) of the definition of Reset Date, then the Holder, in such Holder's sole discretion, may deem the conditions for a Reset satisfied with respect to such Warrants that have been registered for resale such that the terms of Section 2(d)(i) and (d)(ii) shall apply to such Warrants. For the avoidance of doubt, the Company's obligations will continue to apply with regard to the Warrants comprising the Registrable Securities which have not been registered for resale.

(e) Share Combination Event Adjustment. In addition to the adjustments set forth in this Section 2, if at any time on or after the Issuance Date there occurs any share split, reverse share split, share dividend, share combination recapitalization or other similar transaction involving the Common Shares (each, a "**Share Combination Event**"), and such date on which the Share Combination Event is effected, the "**Share Combination Event Date**") and the lowest Weighted Average Price of the Common Shares during the period commencing on the Trading Day immediately following the applicable Share Combination Event Date and ending on the fifth (5th) Trading Day immediately following the applicable Share Combination Event Date (such period the "**Share Combination Adjustment Period**") and such price the "**Event Market Price**") (provided if the Share Combination Event is effective after the close of trading on the Principal Market (or if the Common Shares no longer trade on the Principal Market, on the primary Eligible Market on which the Common Shares then trade), then commencing on the next Trading Day), is less than the Exercise Price then in effect (after giving effect to the adjustment in clause 2(c) above), then, at the close of trading on the Principal Market (or if the Common Shares no longer trade on the Principal Market, on the primary Eligible Market on which the Common Shares then trade) on the last day of the Share Combination Adjustment Period, the Exercise Price then in effect on such 5th Trading Day shall be reduced (but in no event increased) to the Event Market Price and the number of Warrant Shares issuable upon exercise of this Warrant hereunder (such resulting number, the "**Share Combination Issuable Shares**") shall be increased such that the aggregate Exercise Price payable hereunder, after taking into account the decrease in the Exercise Price, shall be equal to the aggregate Exercise Price on the Issuance Date for the Warrant Shares then outstanding. For the avoidance of doubt, if the adjustment in this Section 2(e) would otherwise result in an increase in the Exercise Price hereunder, no adjustment shall be made, and if this Warrant is exercised, on any date on which the Holder delivers an Exercise Notice to the Company (an "**Exercise Date**") during the Share Combination Adjustment Period, solely with respect to such portion of this Warrant exercised on such applicable Exercise Date, such applicable Share Combination Adjustment Period shall be deemed to have ended on, and include, the Trading Day immediately prior to such Exercise Date and the Event Market Price on such applicable Exercise Date will be the lowest Weighted Average Price of the Common Shares immediately prior to the Share Combination Event Date and ending on, and including the Trading Day immediately prior to such Exercise Date.

- 12 -

(f) Other Events. If any event occurs of the type contemplated by the provisions of this Section 2 but not expressly provided for by such provisions (including, without limitation, the granting of stock appreciation rights, phantom stock rights or other rights with equity features), then the Company's Board of Directors will make an appropriate adjustment in the Exercise Price and the number of Warrant Shares, as mutually determined by the Company's Board of Directors and the Required Holders, so as to protect the rights of the Holder; provided that no such adjustment pursuant to this Section 2(f) will increase the Exercise Price or decrease the number of Warrant Shares as otherwise determined pursuant to this Section 2.

2. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Shares, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "**Distribution**"), at any time after the issuance of this Warrant and while the Warrant is outstanding, then, in each such case, the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to the record date fixed for determination of shareholders entitled to receive such distribution by a fraction of which the denominator shall be the Weighted Average Price determined as of the record date mentioned above, and of which the numerator shall be such Weighted Average Price on such record date less the then per share fair market value at such record date of the portion of such assets or evidence of indebtedness or rights or warrants so distributed applicable to one outstanding Ordinary Share as determined by the Board of Directors in good faith. In either case the adjustments shall be described in a statement provided to the Holder of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one Ordinary Share. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

3. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Shares (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of Common Shares acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such Common Shares as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Required Holders, including agreements, if so requested by the Holder, to deliver to each holder of the SPA Warrants in exchange for such SPA Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the Common Shares reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and satisfactory to the Required

Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Shares pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction that was within the Company's control to enter into or to avoid shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. No later than (i) thirty (30) days prior to the occurrence or consummation of any Fundamental Transaction or (ii) if later, the first Trading Day following the date the Company first becomes aware of the occurrence or potential occurrence of a Fundamental Transaction, the Company shall deliver written notice thereof via facsimile or electronic mail and overnight courier to the Holder. Upon the occurrence or consummation of any Fundamental Transaction that was within the Company's control to enter into or to avoid, it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the quotient obtained by dividing (x) the Aggregate Consideration, by (y) the Closing Sale Price of the Common Shares on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (ii) the highest exchange ratio pursuant to which any shareholder of the Company may exchange Common Shares for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at

any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, Common Shares, Successor Capital Stock or, in lieu of the Common Shares or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be Common Shares, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction pursuant to which holders of Common Shares are entitled to receive securities, cash, assets or other property with respect to or in exchange for Common Shares (a “**Corporate Event**”), the Company shall make appropriate provision to ensure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, Common Shares or Successor Capital Stock or, if so elected by the Holder, in lieu of the Common Shares (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the Common Shares or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for Common Shares), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any Common Shares) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and Corporate Events.

- 14 -

4. NON-CIRCUMVENTION. The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Association or Memorandum of Association, as amended and restated, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any Common Shares receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Common Shares upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Common Shares, solely for the purpose of effecting the exercise of the SPA Warrants, 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise).

5. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person’s capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person’s capacity as the Holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide

the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

6. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

- 15 -

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no SPA Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of Common Shares underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

7. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Shares, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Shares or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of exercise specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

8. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

9. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

- 16 -

10. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

11. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

12. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

- 17 -

13. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company, except as may otherwise be required by Section 2(f) of the Securities Purchase Agreement.

14. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

15. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall contemporaneously with any such receipt or delivery publicly disclose such material, nonpublic information on a Report of Foreign Private Issuer on Form 6-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

16. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended.

(b) “**Affiliate**” shall have the meaning ascribed to such term in Rule 405 of the 1933 Act.

(c) “**Approved Stock Plan**” means any employee benefit plan or share incentive plan which has been approved by the Board of Directors of the Company, pursuant to which the Company’s securities may be issued to any employee, officer or director for services provided to the Company.

(d) “**Attribution Parties**” means, collectively, the following Persons: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Common Shares would or could be aggregated with the Holder’s and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

- 18 -

(e) Intentionally omitted.

(f) “**Bloomberg**” means Bloomberg Financial Markets.

(g) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(h) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported on the Pink Open Market. If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(i) Intentionally omitted.

(j) “**Convertible Securities**” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Shares.

(k) Intentionally omitted.

- 19 -

(l) “**Eligible Market**” means the Principal Market, the NYSE American, The Nasdaq Global Select Market, The Nasdaq Global Market, The New York Stock Exchange, Inc., the OTC QB or the OTC QX.

(m) “**Excluded Securities**” means any Common Shares issued or issuable or deemed to be issued in accordance with Section 2(a) hereof by the Company: (i) under any Approved Stock Plan, (ii) upon exercise of any SPA Warrants, any Series B Warrants and any Pre-funded Warrants, in each case, issued pursuant to the Securities Purchase Agreement; provided, that the terms of such SPA Warrants, Series B Warrants and Pre-funded Warrants are not amended, modified or changed on or after the Subscription Date, (iii) upon conversion, exercise or exchange of any Options or Convertible Securities which are outstanding on the day immediately preceding the Subscription Date; provided, that such issuance of Common Shares upon exercise of such Options or Convertible Securities is made pursuant to the terms of such Options or Convertible Securities in effect on the date immediately preceding the Subscription Date and such Options or Convertible Securities are not amended, modified or changed on or after the Subscription Date (except that any amendments, modifications or changes to such Options or Convertible Securities are required by the terms thereof), (iv) upon a dividend or distribution to all holders of Common Shares (including pursuant to a rights plan) or (v) upon a stock split, reverse stock split, distribution of bonus shares, combination or other recapitalization events.

(n) “**Expiration Date**” means the date that is the five year and six month anniversary of the Issuance Date or, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next day that is not a Holiday.

(o) Intentionally omitted.

(p) Intentionally omitted.

(q) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant

subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Shares be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least (x) 50% of the outstanding Common Shares, (y) 50% of the outstanding Common Shares calculated as if any Common Shares held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of Common Shares such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding Common Shares, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding Common Shares, (y) at least 50% of the outstanding Common Shares calculated as if any Common Shares held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of Common Shares such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding Common Shares, or (v) reorganize, recapitalize or reclassify its Common Shares, (B) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Shares, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares not held by all such Subject Entities as of the Subscription Date calculated as if any Common Shares held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding Common Shares or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their Common Shares without approval of the shareholders of the Company or (C) directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

- 20 -

(r) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) Intentionally omitted.

(t) Intentionally omitted.

(u) “**Options**” means any rights, warrants or options to subscribe for or purchase (i) Common Shares or (ii) Convertible Securities.

(v) “**Common Shares**” means (i) the Company’s Common Shares, par value \$0.24 per share, and (ii) any share capital into which such Common Shares shall have been changed or any share capital resulting from a reclassification, reorganization or reclassification of such Common Shares.

(w) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common capital or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of

such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(x) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(y) “**Pre-funded Warrants**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(z) “**Principal Market**” means The Nasdaq Capital Market.

(aa) Intentionally omitted.

(bb) Intentionally omitted.

(cc) Intentionally omitted.

(dd) Intentionally omitted.

(ee) “**Registration Rights Agreement**” means that certain Registration Rights Agreement dated as of the Subscription Date by and among the Company and the Buyers.

(ff) “**Registration Statement**” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Buyers of the Registrable Securities (as defined in the Registration Rights Agreement).

(gg) “**Required Holders**” means the holders of the SPA Warrants representing at least a majority of the Common Shares underlying the SPA Warrants then outstanding.

(hh) Intentionally omitted.

(ii) “**Reset Date**” shall have the meaning ascribed to such term in the Series B Warrants.

(jj) “**Reset Price**” shall have the meaning ascribed to such term in the Series B Warrants.

(kk) Intentionally omitted.

- 21 -

(ll) Intentionally omitted.

(mm) “**Series B Warrants**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(nn) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Eligible Market with respect to the Common Shares as in effect on the date of delivery of the applicable Exercise Notice.

(oo) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(pp) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(qq) Intentionally omitted.

(rr) Intentionally omitted.

(ss) “**Trading Day**” means any day on which the Common Shares are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Shares on such day, then on the principal securities exchange or securities market on which the Common Shares are then traded.

(tt) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported on the Pink Open Market. If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

- 22 -

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Shares to be duly executed as of the Issuance Date set out above.

TANTECH HOLDINGS LTD

By: _____

Name:

Title:

EXHIBIT A

EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON SHARES**

TANTECH HOLDINGS LTD

The undersigned holder hereby exercises the right to purchase _____ Common Shares (“**Warrant Shares**”) of Tantech Holdings Ltd, a British Virgin Islands business company (the “**Company**”), evidenced by the attached Warrant to Purchase Common Shares (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

_____ a “Cash Exercise” with respect to _____ Warrant Shares; and/or

_____ a “Cashless Exercise” with respect to _____ Warrant Shares, resulting in a delivery obligation of the Company to the Holder of _____ Common Shares representing the applicable Net Number.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of Common Shares in accordance with the Transfer Agent Instructions dated _____, 2024 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

TANTECH HOLDINGS LTD

By: _____

Name:

Title:

[FORM OF SERIES B WARRANT]

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

TANTECH HOLDINGS LTD

Series B Warrant To Purchase Common Shares

Warrant No.: _____

Number of Common Shares: the Maximum Eligibility Number

Date of Issuance: [____], 2024 (“**Issuance Date**”)

Tantech Holdings Ltd, a British Virgin Islands business company (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [HOLDER], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after the date hereof, but not after 11:59 p.m., New York time, on the Expiration Date, (as defined below), up to a maximum of the Maximum Eligibility Number fully paid nonassessable Common Shares, subject to adjustment as provided herein (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Shares (including any Warrants to Purchase Common Shares issued in exchange, transfer or replacement hereof, this “**Warrant**”), shall have the meanings set forth in Section 17. This Warrant is one of the Series B Warrants to purchase Common Shares (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of [●], 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein (the “**Securities Purchase Agreement**”). Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Securities Purchase Agreement.

- 1 -

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery (whether via email or otherwise) of a written notice, in the form attached hereto as Exhibit A (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company in the Exercise Notice that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. On or before the first (1st) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by electronic mail an acknowledgment of

confirmation of receipt of the Exercise Notice to the Holder and the Company's transfer agent (the "**Transfer Agent**"). On or before the earlier of (i) the second (2nd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, in each case, following the date on which the Holder delivers the Exercise Notice to the Company, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the Trading Day following the date on which the Company has received the Exercise Notice (the "**Share Delivery Date**") (provided that if the Aggregate Exercise Price has not been delivered by such date and the Holder has indicated in the Exercise Notice that the Holder is exercising the Warrant for cash, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company ("**DTC**") Fast Automated Securities Transfer Program and (A) the Warrant Shares are subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would be available for resale of the Warrant Shares by the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program or (A) the Warrant Shares are not subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would not be available for resale of the Warrant Shares by the Holder, deliver to the Holder, book entry statements evidencing the Warrant Shares, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the book entry statements evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company's obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination. **Notwithstanding any provision of this Warrant to the contrary, no more than the Maximum Eligibility Number of Warrant Shares shall be exercisable hereunder.**

- 2 -

(b) Exercise Price. For purposes of this Warrant, "**Exercise Price**" means \$0.0001 per share, subject to adjustment as provided herein.

(c) Company's Failure to Timely Deliver Securities. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the Weighted Average Price of the Common Shares on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the third Trading Day after the Share Delivery Date) for each Trading Day after such Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. Additionally, if the Company shall fail to cause the Transfer Agent to transmit to the Holder on or prior to the Share Delivery Date, Warrant Shares pursuant to an exercise notice delivered by the Holder and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, Common Shares to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall, within three (3) Trading Days after the Holder's request, (a) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the Common Shares so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to

the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (b) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Common Shares that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Shares having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of Common Shares with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (a) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Common Shares upon the exercise of this Warrant as required pursuant to the terms hereof.

- 3 -

(d) Cashless Exercise. While the Series B Warrants are outstanding, the Company will use its best efforts to maintain the effectiveness of the Registration Statement. Notwithstanding anything contained herein to the contrary, if the Registration Statement covering the resale of the Warrant Shares is not available for the resale of such Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of Common Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\text{Net Number} = \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A=the total number of shares with respect to which this Warrant is then being exercised if such exercise were by means of a cash exercise rather than a Cashless Exercise.

B=as applicable: (i) the Weighted Average Price of the Common Shares on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the Weighted Average Price on the Trading Day immediately preceding the date of the applicable Exercise Notice or (z) the bid price of the Common Shares on the principal Trading Market as reported by Bloomberg as of the time of the Holder's execution of the applicable Exercise Notice, if such Exercise Notice is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 1(a) hereof or (iii) the Weighted Average Price of the Common Shares on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of "regular trading hours" on such Trading Day;

C=the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

- 4 -

If the Warrant Shares are issued pursuant to this Section 1(d), the Company hereby acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares issued in a Cashless Exercise shall be

deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement. The Company agrees not to take any position contrary to this Section 1(d).

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Beneficial Ownership Limitations on Exercises. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the number of Common Shares outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of Common Shares beneficially owned by the Holder and the other Attribution Parties shall include the number of Common Shares held by the Holder and all other Attribution Parties plus the number of Common Shares issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of Common Shares which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Series A Warrants) and Pre-funded Warrants beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding Common Shares the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding Common Shares as reflected in (x) the Company’s most recent Annual Report on Form 20-F, Report on Form 6-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of Common Shares outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding Common Shares is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of Common Shares then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Trading Day confirm orally and in writing or by electronic mail to the Holder the number of Common Shares then outstanding. In any case, the number of outstanding Common Shares shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Shares to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding Common Shares (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the Common Shares issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph

with respect to any subsequent determination of exercisability. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

- 5 -

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved Common Shares to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of Common Shares equal to 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding without regard to any limitation on exercise included herein and assuming that the Maximum Eligibility Number is being determined based on a Reset Price equal to \$0.137 (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the Subscription Date) (the “**Required Reserve Amount**” and the failure to have such sufficient number of authorized and unreserved Common Shares, an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized Common Shares to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, if shareholder approval is required to cure an Authorized Share Failure, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its shareholders for the approval of an increase in the number of authorized Common Shares. In connection with such meeting, the Company shall provide each shareholder with a proxy statement and shall use its best efforts to solicit its shareholders’ approval of such increase in authorized Common Shares and to cause its board of directors to recommend to the shareholders that they approve such proposal. Notwithstanding the foregoing, if any such time of an Authorized Share Failure, the Company is able to obtain the approval of holders of a majority of the Common Shares voting at a general meeting to approve the increase in the number of authorized Common Shares, the Company may satisfy this obligation by obtaining such approval.

2. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF WARRANT SHARES. The Exercise Price and the number of Warrant Shares shall be adjusted from time to time as follows:

(a) Maximum Eligibility Number Reset.

(i) The Maximum Eligibility Number shall be increased (but not decreased) on the Reset Date to equal the Reset Share Amount.

(ii) Notwithstanding the foregoing, if a Holder requests to exercise this Warrant in whole or in part on any given date during the Reset Period but prior to the Reset Date, solely with respect to such portion of this Warrant being exercised on such applicable date (the “**Exercise Date**”), (a) such applicable Reset Date shall be deemed to mean the Exercise Date, (b) such applicable Reset Period shall be deemed to have ended on the Trading Day immediately prior to the Exercise Date, and (c) the applicable Reset Price and Reset Share Amount for such exercised Warrants shall be calculated pursuant to this Section 2(a). For the avoidance of doubt, following the calculation of the Reset Price and Reset Share Amount pursuant to this Section 2(a)(ii), the Company’s obligations with regard to such exercised Warrants shall be deemed satisfied and no additional Reset Price and Reset Share Amount shall apply to such exercised Warrants.

(b) Adjustment Upon Subdivision or Combination of Common Shares. If the Company at any time on or after the Subscription Date subdivides (by any stock split, stock dividend, recapitalization or otherwise) one or more classes of its outstanding Common Shares into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision will be proportionately reduced and the number of Warrant Shares will be proportionately increased. If the Company at any time on or after the Subscription Date combines (by combination, reverse stock split or otherwise) one or more classes of its outstanding Common Shares into a smaller number of shares, the Exercise Price in effect immediately prior to such combination will be proportionately increased and the number of Warrant

Shares will be proportionately decreased. Any adjustment under this Section 2(b) shall become effective at the close of business on the date the subdivision or combination becomes effective.

- 6 -

(c) Partial Reset. If less than all of the Registrable Securities have been registered pursuant to the clause (i) of the definition of Reset Date and a Holder has deemed the condition satisfied as to such Registrable Securities, then the Reset Date shall apply only to such portion of the Registrable Securities, and the Company's obligations will continue to apply with regard to the Registrable Securities for which the definition of Reset Date has not been not satisfied.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Shares, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "**Distribution**"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of Common Shares acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the participation in such Distribution (provided, however, that to the extent that the Holder's right to participate in any such Distribution would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution to such extent (and shall not be entitled to beneficial ownership of such Common Shares as a result of such Distribution (and beneficial ownership) to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution held similarly in abeyance) to the same extent as if there had been no such limitation).

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. In addition to any adjustments pursuant to Section 2 above, if at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Shares (the "**Purchase Rights**"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of Common Shares acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such Common Shares as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

- 7 -

(b) **Fundamental Transactions.** The Company shall not enter into a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Required Holders, including agreements, if so requested by the Holder, to deliver to each holder of the SPA Warrants in exchange for such SPA Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the Common Shares reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Shares pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction that was within the Company's control to enter into or to avoid shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. No later than (i) thirty (30) days prior to the occurrence or consummation of any Fundamental Transaction or (ii) if later, the first Trading Day following the date the Company first becomes aware of the occurrence or potential occurrence of a Fundamental Transaction, the Company shall deliver written notice thereof via facsimile or electronic mail and overnight courier to the Holder. Upon the occurrence or consummation of any Fundamental Transaction that was within the Company's control to enter into or to avoid, it shall be a required condition to the occurrence or consummation of any such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the product of (i) the quotient obtained by dividing (x) the Aggregate Consideration, by (y) the Closing Sale Price of the Common Shares on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (ii) the highest exchange ratio pursuant to which any shareholder of the Company may exchange Common Shares for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held

in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction that was within the Company's control to enter into or to avoid, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, Common Shares, Successor Capital Stock or, in lieu of the Common Shares or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be Common Shares, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction that was within the Company's control to enter into or to avoid, pursuant to which holders of Common Shares are entitled to receive securities, cash, assets or other property with respect to or in exchange for Common Shares (a "**Corporate Event**"), the Company shall make appropriate provision to ensure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, Common Shares or Successor Capital Stock or, if so elected by the Holder, in lieu of the Common Shares (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the Common Shares or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for Common Shares), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any Common Shares) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and Corporate Events.

5. **NON-CIRCUMVENTION.** The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Association or Memorandum of Association, as amended and restated, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any Common Shares receivable upon the exercise of this Warrant above the Exercise Price then in effect, (ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Common Shares upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Common Shares, solely for the purpose of effecting the exercise of the SPA Warrants, 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise and assuming that the Maximum Eligibility Number is being determined

based on a Reset Price equal to \$0.137 (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the Subscription Date)).

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

- 9 -

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no SPA Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of Common Shares underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting

forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Shares, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Shares or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of exercise specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed to operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

- 10 -

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

- 11 -

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company, except as may otherwise be required by Section 2(f) of the Securities Purchase Agreement.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall contemporaneously with any such receipt or delivery publicly disclose such material, nonpublic information on a Report of Foreign Private Issuer on Form 6-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company so shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended.

- 12 -

(b) “**Affiliate**” shall have the meaning ascribed to such term in Rule 405 of the 1933 Act.

(c) Intentionally omitted.

(d) “**Attribution Parties**” means, collectively, the following Persons: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder’s investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial

ownership of the Common Shares would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(e) **"Black Scholes Value"** means the value of this Warrant calculated using the Black-Scholes Option Pricing Model obtained from the "OV" function on Bloomberg determined as of the day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, for pricing purposes and reflecting (i) a risk-free interest rate corresponding to the U.S. Treasury rate for a period equal to the remaining term of this Warrant as of such date of request, (ii) an expected volatility equal to the greater of 100% and the 100 day volatility obtained from the HVT function on Bloomberg as of the Trading Day immediately following the public announcement of the applicable Fundamental Transaction, or, if the Fundamental Transaction is not publicly announced, the date the Fundamental Transaction is consummated, (iii) the underlying price per share used in such calculation shall be the greater of (x) the highest Weighted Average Price of the Common Shares during the period beginning on the Trading Day prior to the execution of definitive documentation relating to the applicable Fundamental Transaction and ending on (A) the Trading Day immediately following the public announcement of such Fundamental Transaction, if the applicable Fundamental Transaction is publicly announced or (B) the Trading Day immediately following the consummation of the applicable Fundamental Transaction if the applicable Fundamental Transaction is not publicly announced and (y) the sum of the price per share being offered in cash, if any, plus the value of any non-cash consideration, if any, being offered in the Fundamental Transaction, (iv) a zero cost of borrow and (v) a 360 day annualization factor.

(f) **"Bloomberg"** means Bloomberg Financial Markets.

(g) **"Business Day"** means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(h) **"Closing Bid Price"** and **"Closing Sale Price"** means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported on the Pink Open Market. If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

- 13 -

(i) **"Closing Date"** shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(j) **"Convertible Securities"** means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Shares.

(k) Intentionally omitted.

(l) “**Eligible Market**” means the Principal Market, the NYSE American, The Nasdaq Global Select Market, The Nasdaq Global Market, The New York Stock Exchange, Inc., the OTC QB or the OTC QX.

(m) Intentionally omitted.

(n) “**Expiration Date**” means the date that is the five year and six month anniversary of the Issuance Date, if such date falls on a day other than a Business Day or on which trading does not take place on the Principal Market (a “**Holiday**”), the next day that is not a Holiday.

(o) Reserved.

(p) Reserved.

(q) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Shares be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of more than either (x) 50% of the outstanding Common Shares, (y) 50% of the outstanding Common Shares calculated as if any Common Shares held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of Common Shares such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of more than 50% of the outstanding Common Shares, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) more than 50% of the outstanding Common Shares, (y) more than 50% of the outstanding Common Shares calculated as if any Common Shares held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of Common Shares such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of more than 50% of the outstanding Common Shares, or (v) reorganize, recapitalize or reclassify its Common Shares, (B) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Shares, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) more than 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares, (y) more than 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares not held by all such Subject Entities as of the Subscription Date calculated as if any Common Shares held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding Common Shares or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their Common Shares without approval of the shareholders of the Company or (C) directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

(r) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(s) “**Maximum Eligibility Number**” means initially zero (0) and such number shall be increased (but not decreased) on the Reset Date in accordance with Section 2(a), subject to any exercise pursuant to Section 2(c).

(t) Intentionally omitted.

(u) “**Options**” means any rights, warrants or options to subscribe for or purchase (i) Common Shares or (ii) Convertible Securities.

(v) “**Common Shares**” means (i) the Company’s Common Shares, par value \$0.24 per share, and (ii) any share capital into which such Common Shares shall have been changed or any share capital resulting from a reclassification, reorganization or reclassification of such Common Shares.

(w) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common capital or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(x) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(y) “**Pre-funded Warrants**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(z) “**Principal Market**” means The Nasdaq Capital Market.

(aa) “**Public Information Failure**” shall mean any time that the Company shall fail to satisfy any condition set forth in Rule 144(i)(2).

(bb) “**Purchase Price**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(cc) “**Purchased Shares**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(dd) “**Registrable Securities**” shall have the meaning ascribed to such term in the Registration Rights Agreement.

(ee) “**Registration Rights Agreement**” means that certain Registration Rights Agreement dated as of the Subscription Date by and among the Company and the Buyers.

- 15 -

(ff) “**Registration Statement**” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Buyers of the Registrable Securities (as defined in the Registration Rights Agreement).

(gg) “**Required Holders**” means the holders of the SPA Warrants representing at least a majority of the Common Shares underlying the SPA Warrants then outstanding.

(hh) “**Reset Date**” means the date that is the earlier of (A) the first (1st) Trading Day after the date on which for ten (10) consecutive Trading Days all Registrable Securities have become and remained registered pursuant to an effective Registration Statement that is available for the resale of all Registrable Securities, provided, if less than all Registrable Securities have become registered for resale on the date that a Registration Statement is declared effective, the Holder with respect to itself only, shall have the right in its sole and absolute discretion to deem such condition satisfied, including with regard only to the Registrable Securities that have been so registered or (B) the eleventh (11th) Trading Day after the date on which the Holder, for ten (10) consecutive Trading Days, can sell all Registrable Securities pursuant to Rule 144 without restriction or limitation and the Company has not had a Public Information Failure. In the event that either of clauses (A) or (B) in the immediately preceding sentence has not occurred, “Reset Date” means the eleventh (11th) Trading Day after twelve (12) months and thirty (30) Trading Days immediately following the Issuance Date.

(ii) “**Reset Period**” means the period commencing on the Reset Period Start Date (as defined below) and ending on the tenth (10th) Trading Day after the Reset Period Start Date (the reset goes into effect on the eleventh (11th) Trading Day after the Reset Period Start Date). The “Reset Period Start Date” shall mean the earlier of (A) the first (1st) Trading Day after a Registration Statement is declared effective, or (B) the first (1st) Trading Day after the date on which the Holder can sell all Registrable Securities pursuant to Rule 144 without restriction or limitation. In the event that either of clauses (A) or (B) in the immediately preceding sentence has not occurred, “Reset Period Start Date” means the first (1st) Trading Day after twelve (12) months and thirty (30) Trading Days immediately following the Issuance Date.

(jj) “**Reset Price**” means the greater of (i) the lowest daily Weighted Average Price of the Common Shares during the Reset Period and (ii) \$0.137 (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the Subscription Date).

(kk) “**Reset Share Amount**” means the number of Common Shares equal to the number (if positive) obtained by subtracting (I) the sum of (x) the number of Purchased Shares purchased by the Holder on the Closing Date pursuant to the Securities Purchase Agreement (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the Subscription Date) and (y) the number of Common Shares issuable upon exercise in full of any Pre-funded Warrants (without regard to any limitation on exercise contained therein) purchased by the Holder on the Closing Date pursuant to the Securities Purchase Agreement (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the Subscription Date), from (II) the quotient determined by dividing (x) the sum of (i) the aggregate Purchase Price paid by the Holder on the Closing Date and (ii) the aggregate of all exercise prices paid or payable by the Holder upon exercise in full of the Pre-Funded Warrants, by (y) the applicable Reset Price determined as of the Reset Date.

- 16 -

(ll) Intentionally omitted.

(mm) “**Series A Warrants**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(nn) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Eligible Market with respect to the Common Shares as in effect on the date of delivery of the applicable Exercise Notice.

(oo) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(pp) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more

Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(qq) Intentionally omitted.

(rr) Intentionally omitted.

(ss) “**Trading Day**” means any day on which the Common Shares are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Shares on such day, then on the principal securities exchange or securities market on which the Common Shares are then traded.

(tt) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported on the Pink Open Market. If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

- 17 -

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Shares to be duly executed as of the Issuance Date set out above.

TANTECH HOLDINGS LTD

By: _____

Name:

Title:

EXHIBIT A

EXERCISE NOTICE

**TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON SHARES**

TANTECH HOLDINGS LTD

The undersigned holder hereby exercises the right to purchase _____ Common Shares (“**Warrant Shares**”) of Tantech Holdings Ltd, a British Virgin Islands business company (the “**Company**”), evidenced by the attached Warrant to Purchase Common Shares (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

_____ a “Cash Exercise” with respect to _____ Warrant Shares; and/or

_____ a “Cashless Exercise” with respect to _____ Warrant Shares, resulting in a delivery obligation of the Company to the Holder of _____ Common Shares representing the applicable Net Number.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of Common Shares in accordance with the Transfer Agent Instructions dated _____, 2024 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

TANTECH HOLDINGS LTD

By: _____

Name:

Title:

NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (B) AN OPINION OF COUNSEL SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

TANTECH HOLDINGS LTD.

PRE-FUNDED WARRANT TO PURCHASE COMMON SHARES

Warrant No.:

Number of Common Shares:

Date of Issuance: [●] (“**Issuance Date**”)

Tantech Holdings Ltd., a British Virgin Islands business company (the “**Company**”), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [●], the registered holder hereof or its permitted assigns (the “**Holder**”), is entitled, subject to the terms set forth below, to purchase from the Company, at the Exercise Price (as defined below) then in effect, at any time or times on or after the date hereof until this Warrant is exercised in full, [●] fully paid and nonassessable Common Shares, subject to adjustment as provided herein (the “**Warrant Shares**”). Except as otherwise defined herein, capitalized terms in this Warrant to Purchase Common Shares (including any Warrants to Purchase Common Shares issued in exchange, transfer or replacement hereof, this “**Warrant**”), shall have the meanings set forth in Section 17. This Warrant is one of the Pre-funded Warrants to purchase Common Shares (the “**SPA Warrants**”) issued pursuant to Section 1 of that certain Securities Purchase Agreement, dated as of April 22, 2024 (the “**Subscription Date**”), by and among the Company and the investors (the “**Buyers**”) referred to therein (the “**Securities Purchase Agreement**”). Capitalized terms used herein and not otherwise defined shall have the definitions ascribed to such terms in the Securities Purchase Agreement.

1. EXERCISE OF WARRANT.

(a) Mechanics of Exercise. Subject to the terms and conditions hereof (including, without limitation, the limitations set forth in Section 1(f)), this Warrant may be exercised by the Holder at any time or times on or after the Issuance Date, in whole or in part, by (i) delivery (whether via email or otherwise) of a written notice, in the form attached hereto as Exhibit A (the “**Exercise Notice**”), of the Holder’s election to exercise this Warrant and (ii) (A) payment to the Company of an amount equal to the applicable Exercise Price in effect on the date of such exercise multiplied by the number of Warrant Shares as to which this Warrant is being exercised (the “**Aggregate Exercise Price**”) in cash by wire transfer of immediately available funds or (B) if the provisions of Section 1(d) are applicable, by notifying the Company in the Exercise Notice that this Warrant is being exercised pursuant to a Cashless Exercise (as defined in Section 1(d)). The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice with respect to less than all of the Warrant Shares shall have the same effect as cancellation of the original Warrant and issuance of a new Warrant evidencing the right to purchase the remaining number of Warrant Shares. On or before the first (1st) Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by electronic mail an acknowledgment of confirmation of receipt of the Exercise Notice to the Holder and the Company’s transfer agent (the “**Transfer**

Agent”). On or before the earlier of (i) the second (2nd) Trading Day and (ii) the number of Trading Days comprising the Standard Settlement Period, in each case, following the date on which the Holder delivers the Exercise Notice to the Company, so long as the Holder delivers the Aggregate Exercise Price (or notice of a Cashless Exercise) on or prior to the Trading Day following the date on which the Company has received the Exercise Notice (the “**Share Delivery Date**”) (provided that if the Aggregate Exercise Price has not been delivered by such date and the Holder has indicated in the Exercise Notice that the Holder is exercising the Warrant for cash, the Share Delivery Date shall be one (1) Trading Day after the Aggregate Exercise Price (or notice of a Cashless Exercise) is delivered), the Company shall (X) provided that the Transfer Agent is participating in The Depository Trust Company (“**DTC**”) Fast Automated Securities Transfer Program and (A) the Warrant Shares are subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would be available for resale of the Warrant Shares by the Holder, credit such aggregate number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the Holder’s or its designee’s balance account with DTC through its Deposit / Withdrawal At Custodian system, or (Y) if the Transfer Agent is not participating in the DTC Fast Automated Securities Transfer Program or (A) the Warrant Shares are not subject to an effective resale registration statement in favor of the Holder or (B) if exercised via Cashless Exercise, at a time when Rule 144 would not be available for resale of the Warrant Shares by the Holder, deliver to the Holder book entry statements evidencing the Warrant Shares, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise. The Company shall be responsible for all fees and expenses of the Transfer Agent and all fees and expenses with respect to the issuance of Warrant Shares via DTC, if any. Upon delivery of the Exercise Notice, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date such Warrant Shares are credited to the Holder’s DTC account or the date of delivery of the book entry statements evidencing such Warrant Shares, as the case may be. If this Warrant is submitted in connection with any exercise pursuant to this Section 1(a) and the number of Warrant Shares represented by this Warrant submitted for exercise is greater than the number of Warrant Shares being acquired upon an exercise, then the Company shall as soon as practicable and in no event later than three (3) Trading Days after any exercise and at its own expense, issue a new Warrant (in accordance with Section 7(d)) representing the right to purchase the number of Warrant Shares issuable immediately prior to such exercise under this Warrant, less the number of Warrant Shares with respect to which this Warrant is exercised. No fractional Warrant Shares are to be issued upon the exercise of this Warrant, but rather the number of Warrant Shares to be issued shall be rounded up to the nearest whole number. The Company shall pay any and all taxes which may be payable with respect to the issuance and delivery of Warrant Shares upon exercise of this Warrant. The Company’s obligations to issue and deliver Warrant Shares in accordance with the terms and subject to the conditions hereof are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination.

- 2 -

(b) Exercise Price. The aggregate exercise price of this Warrant, except for a nominal exercise price of \$0.0001 per Warrant Share, was pre-funded to the Company on or prior to the Issuance Date and, consequently, no additional consideration (other than the nominal exercise price of \$0.0001 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever, including in the event this Warrant shall not have been exercised. The remaining unpaid exercise price per Ordinary Share under this Warrant shall be \$0.0001, subject to adjustment hereunder (the “**Exercise Price**”).

(c) Company’s Failure to Timely Deliver Securities. If the Company shall fail to cause the Transfer Agent to transmit to the Holder on or prior to the Share Delivery Date, Warrant Shares pursuant to an exercise notice delivered by the Holder and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder’s brokerage firm otherwise purchases, Common Shares to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a “Buy-In”), then the Company shall, within three (3) Trading Days after the Holder’s request, (a) pay in cash to the Holder the amount, if any, by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the Common Shares so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (b) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not

honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of Common Shares that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Shares having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of Common Shares with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (a) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver Common Shares upon the exercise of this Warrant as required pursuant to the terms hereof.

- 3 -

(d) Cashless Exercise. While the Pre-funded Warrants are outstanding, the Company will use its reasonable best efforts to maintain the effectiveness of the Registration Statement. Notwithstanding anything contained herein to the contrary, if the Registration Statement covering the resale of the Warrant Shares is not available for the resale of such Warrant Shares, the Holder may, in its sole discretion, exercise this Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the Aggregate Exercise Price, elect instead to receive upon such exercise the "Net Number" of Common Shares determined according to the following formula (a "**Cashless Exercise**"):

$$\begin{array}{r} \text{Net Number} \\ = \\ \hline \end{array} \qquad \frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

A=the total number of shares with respect to which this Warrant is then being exercised.

B=as applicable: (i) the Weighted Average Price of the Common Shares on the Trading Day immediately preceding the date of the applicable Exercise Notice if such Exercise Notice is (1) both executed and delivered pursuant to Section 1(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 1(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) the bid price of the Common Shares on the principal Trading Market as reported by Bloomberg as of the time of the Holder's execution of the applicable Exercise Notice, if such Exercise Notice is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 1(a) hereof or (iii) the Weighted Average Price of the Common Shares on the date of the applicable Exercise Notice if the date of such Exercise Notice is a Trading Day and such Exercise Notice is both executed and delivered pursuant to Section 1(a) hereof after the close of "regular trading hours" on such Trading Day;

C=the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

If the Warrant Shares are issued pursuant to this Section 1(d), the Company hereby acknowledges and agrees that, in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares issued in a Cashless Exercise shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued pursuant to the Securities Purchase Agreement. The Company agrees not to take any position contrary to this Section 1(d).

- 4 -

(e) Disputes. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall promptly issue to the Holder the number of Warrant Shares that are not disputed and resolve such dispute in accordance with Section 12.

(f) Beneficial Ownership Limitations on Exercises. Notwithstanding anything to the contrary contained herein, the Company shall not effect the exercise of any portion of this Warrant, and the Holder shall not have the right to exercise any portion of this Warrant, pursuant to the terms and conditions of this Warrant and any such exercise shall be null and void and treated as if never made, to the extent that after giving effect to such exercise, the Holder together with the other Attribution Parties collectively would beneficially own in excess of 4.99% (the “**Maximum Percentage**”) of the number of Common Shares outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of Common Shares beneficially owned by the Holder and the other Attribution Parties shall include the number of Common Shares held by the Holder and all other Attribution Parties plus the number of Common Shares issuable upon exercise of this Warrant with respect to which the determination of such sentence is being made, but shall exclude the number of Common Shares which would be issuable upon (A) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder or any of the other Attribution Parties and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any convertible notes or convertible preferred stock or warrants, including the Series A Warrants and the Series B Warrants (each as defined in the Securities Purchase Agreement)) and Pre-funded Warrants beneficially owned by the Holder or any other Attribution Party subject to a limitation on conversion or exercise analogous to the limitation contained in this Section 1(f). For purposes of this Section 1(f), beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the “**1934 Act**”). For purposes of this Warrant, in determining the number of outstanding Common Shares the Holder may acquire upon the exercise of this Warrant without exceeding the Maximum Percentage, the Holder may rely on the number of outstanding Common Shares as reflected in (x) the Company’s most recent Annual Report on Form 20-F, Current Report on Form 6-K or other public filing with the Securities and Exchange Commission (the “**SEC**”), as the case may be, (y) a more recent public announcement by the Company or (3) any other written notice by the Company or the Transfer Agent setting forth the number of Common Shares outstanding (the “**Reported Outstanding Share Number**”). If the Company receives an Exercise Notice from the Holder at a time when the actual number of outstanding Common Shares is less than the Reported Outstanding Share Number, the Company shall (i) notify the Holder in writing of the number of Common Shares then outstanding and, to the extent that such Exercise Notice would otherwise cause the Holder’s beneficial ownership, as determined pursuant to this Section 1(f), to exceed the Maximum Percentage, the Holder must notify the Company of a reduced number of Warrant Shares to be purchased pursuant to such Exercise Notice (the number of shares by which such purchase is reduced, the “**Reduction Shares**”) and (ii) as soon as reasonably practicable, the Company shall return to the Holder any exercise price paid by the Holder for the Reduction Shares. For any reason at any time, upon the written or oral request of the Holder, the Company shall within one (1) Trading Day confirm orally and in writing or by electronic mail to the Holder the number of Common Shares then outstanding. In any case, the number of outstanding Common Shares shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and any other Attribution Party since the date as of which the Reported Outstanding Share Number was reported. In the event that the issuance of Common Shares to the Holder upon exercise of this Warrant results in the Holder and the other Attribution Parties being deemed to beneficially own, in the aggregate, more than the Maximum Percentage of the number of outstanding Common Shares (as determined under Section 13(d) of the 1934 Act), the number of shares so issued by which the Holder’s and the other Attribution Parties’ aggregate beneficial ownership exceeds the Maximum Percentage (the “**Excess Shares**”) shall be deemed null and void and shall be cancelled ab initio, and the Holder shall not have the power to vote or to transfer the Excess Shares. As soon as reasonably practicable after the issuance of the Excess Shares has been deemed null and void, the Company shall return to the Holder the exercise price paid by the Holder for the Excess Shares. Upon delivery of a written notice to the Company, the Holder may from time to time increase (with such increase not effective until the sixty-first (61st) day after delivery of such notice) or decrease the Maximum Percentage to any other percentage not in excess of 9.99% as specified in such notice; provided that (i) any such increase in the Maximum Percentage will not be effective until the sixty-first (61st) day after such notice is delivered to the Company and (ii) any such increase or decrease will apply only to the Holder and the other Attribution Parties and not to any other holder of SPA Warrants that is not an Attribution Party of the Holder. For purposes of clarity, the Common Shares issuable pursuant to the terms of this Warrant in excess of the Maximum Percentage shall not be deemed to be beneficially owned by the Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the 1934 Act. No prior inability to exercise this Warrant pursuant to this paragraph shall have any effect on the applicability of the provisions of this paragraph with respect to any subsequent determination of exercisability. The provisions of this paragraph shall

be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 1(f) to the extent necessary to correct this paragraph or any portion of this paragraph which may be defective or inconsistent with the intended beneficial ownership limitation contained in this Section 1(f) or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitation contained in this paragraph may not be waived and shall apply to a successor holder of this Warrant.

- 5 -

(g) Insufficient Authorized Shares. If at any time while this Warrant remains outstanding the Company does not have a sufficient number of authorized and unreserved Common Shares to satisfy its obligation to reserve for issuance upon exercise of this Warrant at least a number of Common Shares equal to 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of all of this Warrant then outstanding without regard to any limitation on exercise included herein (the “**Required Reserve Amount**” and the failure to have such sufficient number of authorized and unreserved Common Shares, an “**Authorized Share Failure**”), then the Company shall immediately take all action necessary to increase the Company’s authorized Common Shares to an amount sufficient to allow the Company to reserve the Required Reserve Amount for this Warrant then outstanding. Without limiting the generality of the foregoing sentence, if shareholder approval is required to cure an Authorized Share Failure, as soon as practicable after the date of the occurrence of an Authorized Share Failure, but in no event later than sixty (60) days after the occurrence of such Authorized Share Failure, the Company shall hold a meeting of its shareholders for the approval of an increase in the number of authorized Common Shares.

2. RESERVED.

3. RIGHTS UPON DISTRIBUTION OF ASSETS. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Shares, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property, options, evidence of indebtedness or any other assets by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a “**Distribution**”), at any time after the issuance of this Warrant and while the Warrant is outstanding, then, in each such case, the Exercise Price shall be adjusted by multiplying the Exercise Price in effect immediately prior to the record date fixed for determination of shareholders entitled to receive such distribution by a fraction of which the denominator shall be the Weighted Average Price determined as of the record date mentioned above, and of which the numerator shall be such Weighted Average Price on such record date less the then per share fair market value at such record date of the portion of such assets or evidence of indebtedness or rights or warrants so distributed applicable to one outstanding Ordinary Share as determined by the Board of Directors in good faith. In either case the adjustments shall be described in a statement provided to the Holder of the portion of assets or evidences of indebtedness so distributed or such subscription rights applicable to one Ordinary Share. Such adjustment shall be made whenever any such distribution is made and shall become effective immediately after the record date mentioned above.

4. PURCHASE RIGHTS; FUNDAMENTAL TRANSACTIONS.

(a) Purchase Rights. If at any time the Company grants, issues or sells any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Shares (the “**Purchase Rights**”), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of Common Shares acquirable upon complete exercise of this Warrant (without regard to any limitations or restrictions on exercise of this Warrant, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Shares are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that to the extent that the Holder’s right to participate in any such Purchase Right would result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (and shall not be entitled to beneficial ownership of such Common Shares as a result of such Purchase Right (and beneficial ownership) to such extent) and such Purchase Right to such extent shall be held in abeyance for the benefit of the Holder until such time or times as its right thereto would not result in the Holder and the other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase

Right or on any subsequent Purchase Right held similarly in abeyance) to the same extent as if there had been no such limitation).

(b) Fundamental Transactions. The Company shall not enter into or be a party to a Fundamental Transaction unless the Successor Entity assumes in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 4(b) pursuant to written agreements in form and substance satisfactory to the Required Holders, including agreements, if so requested by the Holder, to deliver to each holder of the SPA Warrants in exchange for such SPA Warrants a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant, including, without limitation, an adjusted exercise price equal to the value for the Common Shares reflected by the terms of such Fundamental Transaction, and exercisable for a corresponding number of shares of capital stock equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and satisfactory to the Required Holders, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Shares pursuant to such Fundamental Transaction and the value of such shares of capital stock, such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the occurrence or consummation of such Fundamental Transaction). Any security issuable or potentially issuable to the Holder pursuant to the terms of this Warrant on the consummation of a Fundamental Transaction that was within the Company's control to enter into or to avoid shall be registered and freely tradable by the Holder without any restriction or limitation or the requirement to be subject to any holding period pursuant to any applicable securities laws. No later than (i) thirty (30) days prior to the occurrence or consummation of any Fundamental Transaction or (ii) if later, the first Trading Day following the date the Company first becomes aware of the occurrence or potential occurrence of a Fundamental Transaction, the Company shall deliver written notice thereof via facsimile or electronic mail and overnight courier to the Holder. Upon the occurrence or consummation of any Fundamental Transaction that was within the Company's control to enter into or to avoid, it shall be a required condition to the occurrence or consummation of any Fundamental Transaction that, the Company and the Successor Entity or Successor Entities, jointly and severally, shall succeed to, and the Company shall cause any Successor Entity or Successor Entities to jointly and severally succeed to, and be added to the term "Company" under this Warrant (so that from and after the date of such Fundamental Transaction, each and every provision of this Warrant referring to the "Company" shall refer instead to each of the Company and the Successor Entity or Successor Entities, jointly and severally), and the Company and the Successor Entity or Successor Entities, jointly and severally, may exercise every right and power of the Company prior thereto and shall assume all of the obligations of the Company prior thereto under this Warrant with the same effect as if the Company and such Successor Entity or Successor Entities, jointly and severally, had been named as the Company in this Warrant, and, solely at the request of the Holder, if the Successor Entity and/or Successor Entities is a publicly traded corporation whose common stock is quoted on or listed for trading on an Eligible Market, shall deliver (in addition to and without limiting any right under this Warrant) to the Holder in exchange for this Warrant a security of the Successor Entity and/or Successor Entities evidenced by a written instrument substantially similar in form and substance to this Warrant and exercisable for a corresponding number of shares of capital stock of the Successor Entity and/or Successor Entities (the "**Successor Capital Stock**") equivalent to the Common Shares acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction (such corresponding number of shares of Successor Capital Stock to be delivered to the Holder shall be equal to the greater of (A) the quotient of (i) the aggregate dollar value of all consideration (including cash consideration and any consideration other than cash ("**Non-Cash Consideration**"), in such Fundamental Transaction, as such values are set forth in any definitive agreement for the Fundamental Transaction that has been executed at the time of the first public announcement of the Fundamental Transaction or, if no such value is determinable from such definitive agreement, as determined in accordance with Section 12 with the term "Non-Cash Consideration" being substituted for the term "Exercise Price") that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant) (the "**Aggregate Consideration**") divided by (ii) the per share Closing Sale Price of such Successor Capital Stock on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (B) the

product of (i) the quotient obtained by dividing (x) the Aggregate Consideration, by (y) the Closing Sale Price of the Common Shares on the Trading Day immediately prior to the consummation or occurrence of the Fundamental Transaction and (ii) the highest exchange ratio pursuant to which any shareholder of the Company may exchange Common Shares for Successor Capital Stock) (provided, however, to the extent that the Holder's right to receive any such shares of publicly traded common stock (or their equivalent) of the Successor Entity would result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, if applicable, then the Holder shall not be entitled to receive such shares to such extent (and shall not be entitled to beneficial ownership of such shares of publicly traded common stock (or their equivalent) of the Successor Entity as a result of such consideration to such extent) and the portion of such shares shall be held in abeyance for the Holder until such time or times, as its right thereto would not result in the Holder and its other Attribution Parties exceeding the Maximum Percentage, at which time or times the Holder shall be delivered such shares to the extent as if there had been no such limitation), and such security shall be satisfactory to the Holder, and with an identical exercise price to the Exercise Price hereunder (such adjustments to the number of shares of capital stock and such exercise price being for the purpose of protecting after the consummation or occurrence of such Fundamental Transaction the economic value of this Warrant that was in effect immediately prior to the consummation or occurrence of such Fundamental Transaction, as elected by the Holder solely at its option). Upon occurrence or consummation of the Fundamental Transaction, and it shall be a required condition to the occurrence or consummation of such Fundamental Transaction that, the Company and the Successor Entity or Successor Entities shall deliver to the Holder confirmation that there shall be issued upon exercise of this Warrant at any time after the occurrence or consummation of the Fundamental Transaction, as elected by the Holder solely at its option, Common Shares, Successor Capital Stock or, in lieu of the Common Shares or Successor Capital Stock (or other securities, cash, assets or other property purchasable upon the exercise of this Warrant prior to such Fundamental Transaction), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights), which for purposes of clarification may continue to be Common Shares, if any, that the Holder would have been entitled to receive upon the happening of such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction, had this Warrant been exercised immediately prior to such Fundamental Transaction or the record, eligibility or other determination date for the event resulting in such Fundamental Transaction (without regard to any limitations on the exercise of this Warrant), as adjusted in accordance with the provisions of this Warrant. In addition to and not in substitution for any other rights hereunder, prior to the occurrence or consummation of any Fundamental Transaction, pursuant to which holders of Common Shares are entitled to receive securities, cash, assets or other property with respect to or in exchange for Common Shares (a "**Corporate Event**"), the Company shall make appropriate provision to ensure that, and any applicable Successor Entity or Successor Entities shall ensure that, and it shall be a required condition to the occurrence or consummation of such Corporate Event that, the Holder will thereafter have the right to receive upon exercise of this Warrant at any time after the occurrence or consummation of the Corporate Event, Common Shares or Successor Capital Stock or, if so elected by the Holder, in lieu of the Common Shares (or other securities, cash, assets or other property) purchasable upon the exercise of this Warrant prior to such Corporate Event (but not in lieu of such items still issuable under Sections 3 and 4(a), which shall continue to be receivable on the Common Shares or on the such shares of stock, securities, cash, assets or any other property otherwise receivable with respect to or in exchange for Common Shares), such shares of stock, securities, cash, assets or any other property whatsoever (including warrants or other purchase or subscription rights and any Common Shares) which the Holder would have been entitled to receive upon the occurrence or consummation of such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event, had this Warrant been exercised immediately prior to such Corporate Event or the record, eligibility or other determination date for the event resulting in such Corporate Event (without regard to any limitations on exercise of this Warrant). Provision made pursuant to the preceding sentence shall be in a form and substance reasonably satisfactory to the Holder. The provisions of this Section 4(b) shall apply similarly and equally to successive Fundamental Transactions and Corporate Events.

5. **NON-CIRCUMVENTION.** The Company hereby covenants and agrees that the Company will not, by amendment of its Articles of Association or Memorandum of Association, as amended and restated, or through any reorganization, transfer of assets, consolidation, merger, scheme of arrangement, dissolution, issue or sale of securities, or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, and will at all times in good faith carry out all of the provisions of this Warrant and take all action as may be required to protect the rights of the Holder. Without limiting the generality of the foregoing, the Company (i) shall not increase the par value of any Common Shares receivable upon the exercise of this Warrant above the Exercise Price then in effect,

(ii) shall take all such actions as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Common Shares upon the exercise of this Warrant, and (iii) shall, so long as any of the SPA Warrants are outstanding, take all action necessary to reserve and keep available out of its authorized and unissued Common Shares, solely for the purpose of effecting the exercise of the SPA Warrants, 100% of the number of Common Shares as shall from time to time be necessary to effect the exercise of the SPA Warrants then outstanding (without regard to any limitations on exercise).

6. WARRANT HOLDER NOT DEEMED A SHAREHOLDER. Except as otherwise specifically provided herein, the Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a shareholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a shareholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company. Notwithstanding this Section 6, the Company shall provide the Holder with copies of the same notices and other information given to the shareholders of the Company generally, contemporaneously with the giving thereof to the shareholders.

7. REISSUANCE OF WARRANTS.

(a) Transfer of Warrant. If this Warrant is to be transferred, the Holder shall surrender this Warrant to the Company, whereupon the Company will forthwith issue and deliver upon the order of the Holder a new Warrant (in accordance with Section 7(d)), registered as the Holder may request, representing the right to purchase the number of Warrant Shares being transferred by the Holder and, if less than the total number of Warrant Shares then underlying this Warrant is being transferred, a new Warrant (in accordance with Section 7(d)) to the Holder representing the right to purchase the number of Warrant Shares not being transferred.

(b) Lost, Stolen or Mutilated Warrant. Upon receipt by the Company of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant, and, in the case of loss, theft or destruction, of any indemnification undertaking by the Holder to the Company in customary form and, in the case of mutilation, upon surrender and cancellation of this Warrant, the Company shall execute and deliver to the Holder a new Warrant (in accordance with Section 7(d)) representing the right to purchase the Warrant Shares then underlying this Warrant.

- 8 -

(c) Exchangeable for Multiple Warrants. This Warrant is exchangeable, upon the surrender hereof by the Holder at the principal office of the Company, for a new Warrant or Warrants (in accordance with Section 7(d)) representing in the aggregate the right to purchase the number of Warrant Shares then underlying this Warrant, and each such new Warrant will represent the right to purchase such portion of such Warrant Shares as is designated by the Holder at the time of such surrender; provided, however, that no SPA Warrants for fractional Warrant Shares shall be given.

(d) Issuance of New Warrants. Whenever the Company is required to issue a new Warrant pursuant to the terms of this Warrant, such new Warrant (i) shall be of like tenor with this Warrant, (ii) shall represent, as indicated on the face of such new Warrant, the right to purchase the Warrant Shares then underlying this Warrant (or in the case of a new Warrant being issued pursuant to Section 7(a) or Section 7(c), the Warrant Shares designated by the Holder which, when added to the number of Common Shares underlying the other new Warrants issued in connection with such issuance, does not exceed the number of Warrant Shares then underlying this Warrant), (iii) shall have an issuance date, as indicated on the face of such new Warrant which is the same as the Issuance Date, and (iv) shall have the same rights and conditions as this Warrant.

8. NOTICES. Whenever notice is required to be given under this Warrant, unless otherwise provided herein, such notice shall be given in accordance with Section 9(f) of the Securities Purchase Agreement. The Company shall provide the Holder with prompt written notice of all actions taken pursuant to this Warrant, including in reasonable detail a description of such action and the reason therefor. Without limiting the generality of the foregoing, the Company will give written notice to the Holder (i) immediately upon any adjustment of the Exercise Price, setting forth in reasonable detail, and certifying, the calculation of such adjustment and (ii) at least fifteen (15) days prior to the date on which the Company closes its books or takes a record (A) with respect to any dividend or distribution upon the Common Shares, (B) with respect to any grants, issuances or sales of any Options, Convertible Securities or rights to purchase stock, warrants, securities or other property to holders of Common Shares or (C) for determining rights to vote with respect to any Fundamental Transaction, dissolution or liquidation; provided in each case that such information shall be made known to the public prior to or in conjunction with such notice being provided to the Holder. It is expressly understood and agreed that the time of exercise specified by the Holder in each Exercise Notice shall be definitive and may not be disputed or challenged by the Company.

9. AMENDMENT AND WAIVER. Except as otherwise provided herein, the provisions of this Warrant may be amended or waived and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holder.

10. GOVERNING LAW; JURISDICTION; JURY TRIAL. This Warrant shall be governed by and construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Warrant shall be governed by, the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The Company hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. The Company hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to the Company at the address set forth in Section 9(f) of the Securities Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Nothing contained herein shall be deemed or operate to preclude the Holder from bringing suit or taking other legal action against the Company in any other jurisdiction to collect on the Company's obligations to the Holder, to realize on any collateral or any other security for such obligations, or to enforce a judgment or other court ruling in favor of the Holder. **THE COMPANY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION WITH OR ARISING OUT OF THIS WARRANT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

- 9 -

11. CONSTRUCTION; HEADINGS. This Warrant shall be deemed to be jointly drafted by the Company and all the Buyers and shall not be construed against any Person as the drafter hereof. The headings of this Warrant are for convenience of reference and shall not form part of, or affect the interpretation of, this Warrant.

12. DISPUTE RESOLUTION. In the case of a dispute as to the determination of the Exercise Price or the arithmetic calculation of the Warrant Shares, the Company shall submit the disputed determinations or arithmetic calculations via facsimile or electronic mail within two (2) Business Days of receipt of the Exercise Notice giving rise to such dispute, as the case may be, to the Holder. If the Holder and the Company are unable to agree upon such determination or calculation of the Exercise Price or the Warrant Shares within three (3) Business Days of such disputed determination or arithmetic calculation being submitted to the Holder, then the Company shall, within two (2) Business Days submit via facsimile or electronic mail (a) the disputed determination of the Exercise Price to an independent, reputable investment bank selected by the Company and approved by the Holder or (b) the disputed arithmetic calculation of the Warrant Shares to the Company's independent, outside accountant. The Company shall cause at its expense the investment bank or the accountant, as the case may be, to perform the determinations or

calculations and notify the Company and the Holder of the results no later than ten (10) Business Days from the time it receives the disputed determinations or calculations. Such investment bank's or accountant's determination or calculation, as the case may be, shall be binding upon all parties absent demonstrable error.

13. REMEDIES, OTHER OBLIGATIONS, BREACHES AND INJUNCTIVE RELIEF. The remedies provided in this Warrant shall be cumulative and in addition to all other remedies available under this Warrant and the other Transaction Documents, at law or in equity (including a decree of specific performance and/or other injunctive relief), and nothing herein shall limit the right of the Holder to pursue actual damages for any failure by the Company to comply with the terms of this Warrant. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Holder and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the holder of this Warrant shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

- 10 -

14. TRANSFER. This Warrant and the Warrant Shares may be offered for sale, sold, transferred, pledged or assigned without the consent of the Company, except as may otherwise be required by Section 2(f) of the Securities Purchase Agreement.

15. SEVERABILITY. If any provision of this Warrant is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Warrant so long as this Warrant as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

16. DISCLOSURE. Upon receipt or delivery by the Company of any notice in accordance with the terms of this Warrant, unless the Company has in good faith determined that the matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries (as defined in the Securities Purchase Agreement), the Company shall contemporaneously with any such receipt or delivery publicly disclose such material, nonpublic information on a Report of Foreign Private Issuer on Form 6-K or otherwise. In the event that the Company believes that a notice contains material, nonpublic information relating to the Company or its Subsidiaries, the Company shall indicate to the Holder contemporaneously with delivery of such notice, and in the absence of any such indication, the Holder shall be allowed to presume that all matters relating to such notice do not constitute material, nonpublic information relating to the Company or its Subsidiaries.

17. CERTAIN DEFINITIONS. For purposes of this Warrant, the following terms shall have the following meanings:

(a) “**1933 Act**” means the Securities Act of 1933, as amended.

(b) “**Affiliate**” shall have the meaning ascribed to such term in Rule 405 of the 1933 Act.

(a) “**Attribution Parties**” means, collectively, the following Persons: (i) any investment vehicle, including, any funds, feeder funds or managed accounts, currently, or from time to time after the Issuance Date, directly or indirectly managed or advised by the Holder's investment manager or any of its Affiliates or principals, (ii) any direct or indirect Affiliates of the Holder or any of the foregoing, (iii) any Person acting or who could be deemed to be acting as a Group together with the Holder or any of the foregoing and (iv) any other Persons whose beneficial ownership of the Common Shares would or could be aggregated with the Holder's and the other Attribution Parties for purposes of Section 13(d) of the 1934 Act. For clarity, the purpose of the foregoing is to subject collectively the Holder and all other Attribution Parties to the Maximum Percentage.

(b) “**Bloomberg**” means Bloomberg Financial Markets.

- 11 -

(c) “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(d) “**Closing Bid Price**” and “**Closing Sale Price**” means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the Principal Market, as reported by Bloomberg, or, if the Principal Market begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 p.m., New York time, as reported by Bloomberg, or, if the Principal Market is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security on the principal securities exchange or trading market where such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported on the Pink Open Market. If the Closing Bid Price or the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Bid Price or the Closing Sale Price, as the case may be, of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

(e) “**Convertible Securities**” means any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for Common Shares.

(f) Intentionally omitted.

(g) “**Eligible Market**” means the Principal Market, the NYSE American, The Nasdaq Global Select Market, The Nasdaq Global Market, The New York Stock Exchange, Inc., the OTC QB or the OTC QX.

- 12 -

(h) “**Fundamental Transaction**” means (A) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, (i) consolidate or merge with or into (whether or not the Company is the surviving corporation) another Subject Entity, or (ii) sell, assign, transfer, convey or otherwise dispose of all or substantially all of the properties or assets of the Company or any of its “significant subsidiaries” (as defined in Rule 1-02 of Regulation S-X) to one or more Subject Entities, or (iii) make, or allow one or more Subject Entities to make, or allow the Company to be subject to or have its Common Shares be subject to or party to one or more Subject Entities making, a purchase, tender or exchange offer that is accepted by the holders of at least (x) 50% of the outstanding Common Shares, (y) 50% of the outstanding Common Shares calculated as if any Common Shares held by all Subject Entities making or party to, or Affiliated with any Subject Entities making or party to, such purchase, tender or exchange offer were not outstanding; or (z) such number of Common Shares such that all Subject Entities making or party to, or Affiliated with any Subject Entity making or party to, such purchase, tender or exchange offer, become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding Common Shares, or (iv) consummate a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with one or more Subject Entities whereby all such Subject Entities, individually or in the aggregate, acquire, either (x) at least 50% of the outstanding Common Shares, (y) at least 50% of the outstanding Common Shares calculated as if any Common Shares held by all the Subject Entities making or party to, or Affiliated with any Subject Entity making or

party to, such stock purchase agreement or other business combination were not outstanding; or (z) such number of Common Shares such that the Subject Entities become collectively the beneficial owners (as defined in Rule 13d-3 under the 1934 Act) of at least 50% of the outstanding Common Shares, or (v) reorganize, recapitalize or reclassify its Common Shares, (B) that the Company shall, directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, allow any Subject Entity individually or the Subject Entities in the aggregate to be or become the “beneficial owner” (as defined in Rule 13d-3 under the 1934 Act), directly or indirectly, whether through acquisition, purchase, assignment, conveyance, tender, tender offer, exchange, reduction in outstanding Common Shares, merger, consolidation, business combination, reorganization, recapitalization, spin-off, scheme of arrangement, reorganization, recapitalization or reclassification or otherwise in any manner whatsoever, of either (x) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares, (y) at least 50% of the aggregate ordinary voting power represented by issued and outstanding Common Shares not held by all such Subject Entities as of the Subscription Date calculated as if any Common Shares held by all such Subject Entities were not outstanding, or (z) a percentage of the aggregate ordinary voting power represented by issued and outstanding Common Shares or other equity securities of the Company sufficient to allow such Subject Entities to effect a statutory short form merger or other transaction requiring other shareholders of the Company to surrender their Common Shares without approval of the shareholders of the Company or (C) directly or indirectly, including through Subsidiaries, Affiliates or otherwise, in one or more related transactions, the issuance of or the entering into any other instrument or transaction structured in a manner to circumvent, or that circumvents, the intent of this definition in which case this definition shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this definition to the extent necessary to correct this definition or any portion of this definition which may be defective or inconsistent with the intended treatment of such instrument or transaction.

- 13 -

(i) “**Group**” means a “group” as that term is used in Section 13(d) of the 1934 Act and as defined in Rule 13d-5 thereunder.

(j) “**Options**” means any rights, warrants or options to subscribe for or purchase (i) Common Shares or (ii) Convertible Securities.

(k) “**Common Shares**” means (i) the Company’s Common Shares, par value \$0.24 per share, and (ii) any share capital into which such Common Shares shall have been changed or any share capital resulting from a reclassification, reorganization or reclassification of such Common Shares.

(l) “**Parent Entity**” of a Person means an entity that, directly or indirectly, controls the applicable Person, including such entity whose common capital or equivalent equity security is quoted or listed on an Eligible Market (or, if so elected by the Required Holders, any other market, exchange or quotation system), or, if there is more than one such Person or such entity, the Person or such entity designated by the Required Holders or in the absence of such designation, such Person or entity with the largest public market capitalization as of the date of consummation of the Fundamental Transaction.

(m) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and a government or any department or agency thereof.

(n) “**Pre-funded Warrants**” shall have the meaning ascribed to such term in the Securities Purchase Agreement.

(o) “**Principal Market**” means The Nasdaq Capital Market.

(p) “**Registration Rights Agreement**” means that certain Registration Rights Agreement dated as of the Subscription Date by and among the Company and the Buyers.

(q) “**Registration Statement**” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Buyers of the Registrable Securities (as defined in the Registration Rights Agreement).

(r) “**Required Holders**” means the holders of the SPA Warrants representing at least a majority of the Common Shares underlying the SPA Warrants then outstanding.

(s) “**Standard Settlement Period**” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Eligible Market with respect to the Common Shares as in effect on the date of delivery of the applicable Exercise Notice.

(t) “**Subject Entity**” means any Person, Persons or Group or any Affiliate or associate of any such Person, Persons or Group.

(u) “**Successor Entity**” means one or more Person or Persons (or, if so elected by the Holder, the Company or Parent Entity) formed by, resulting from or surviving any Fundamental Transaction or one or more Person or Persons (or, if so elected by the Holder, the Company or the Parent Entity) with which such Fundamental Transaction shall have been entered into.

(v) “**Trading Day**” means any day on which the Common Shares are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Shares on such day, then on the principal securities exchange or securities market on which the Common Shares are then traded.

- 14 -

(w) “**Weighted Average Price**” means, for any security as of any date, the dollar volume-weighted average price for such security on the Principal Market during the period beginning at 9:30:01 a.m., New York time (or such other time as the Principal Market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as the Principal Market publicly announces is the official close of trading), as reported by Bloomberg through its “Volume at Price” function or, if the foregoing does not apply, the dollar volume-weighted average price of such security in the over-the-counter market on the electronic bulletin board for such security during the period beginning at 9:30:01 a.m., New York time (or such other time as such market publicly announces is the official open of trading), and ending at 4:00:00 p.m., New York time (or such other time as such market publicly announces is the official close of trading), as reported by Bloomberg, or, if no dollar volume-weighted average price is reported for such security by Bloomberg for such hours, the average of the highest closing bid price and the lowest closing ask price of any of the market makers for such security as reported on the Pink Open Market. If the Weighted Average Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Weighted Average Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 12 with the term “Weighted Average Price” being substituted for the term “Exercise Price.” All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction during the applicable calculation period.

[Signature Page Follows]

- 15 -

IN WITNESS WHEREOF, the Company has caused this Warrant to Purchase Common Shares to be duly executed as of the Issuance Date set out above.

TANTECH HOLDINGS LTD.

By: _____
Name:
Title:

**EXERCISE NOTICE
TO BE EXECUTED BY THE REGISTERED HOLDER TO EXERCISE THIS
WARRANT TO PURCHASE COMMON SHARES**

TANTECH HOLDINGS LTD.

The undersigned holder hereby exercises the right to purchase _____ Common Shares (“**Warrant Shares**”) of Tantech Holdings Ltd., a British Virgin Islands business company (the “**Company**”), evidenced by the attached Warrant to Purchase Common Shares (the “**Warrant**”). Capitalized terms used herein and not otherwise defined shall have the respective meanings set forth in the Warrant.

1. Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as:

_____ a “Cash Exercise” with respect to _____ Warrant Shares; and/or

_____ a “Cashless Exercise” with respect to _____ Warrant Shares, resulting in a delivery obligation of the Company to the Holder of _____ Common Shares representing the applicable Net Number.

2. Payment of Exercise Price. In the event that the holder has elected a Cash Exercise with respect to some or all of the Warrant Shares to be issued pursuant hereto, the holder shall pay the Aggregate Exercise Price in the sum of \$ _____ to the Company in accordance with the terms of the Warrant.

3. Delivery of Warrant Shares. The Company shall deliver to the holder _____ Warrant Shares in accordance with the terms of the Warrant.

Date: _____, _____

Name of Registered Holder

By: _____

Name:

Title:

ACKNOWLEDGMENT

The Company hereby acknowledges this Exercise Notice and hereby directs VStock Transfer, LLC to issue the above indicated number of Common Shares in accordance with the Transfer Agent Instructions dated _____, 2024 from the Company and acknowledged and agreed to by VStock Transfer, LLC.

TANTECH HOLDINGS LTD.

By: _____

Name:

Title:



SECURITIES PURCHASE AGREEMENT

SECURITIES PURCHASE AGREEMENT (this “**Agreement**”), dated as of April 22, 2024, by and among Tantech Holdings Ltd., a company incorporated under the laws of the British Virgin Islands, (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries or affiliates of Tantech Holdings Ltd, the “**Company**”), and the investors listed on the Schedule of Buyers attached hereto (individually, a “**Buyer**” and collectively, the “**Buyers**”).

WHEREAS:

A. The Company and each Buyer is executing and delivering this Agreement in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the “**1933 Act**”), and Rule 506(b) of Regulation D (“**Regulation D**”) as promulgated by the United States Securities and Exchange Commission (the “**SEC**”) under the 1933 Act.

B. Each Buyer wishes to purchase from the Company, and the Company wishes to issue and sell to each Buyer, upon the terms and conditions stated in this Agreement, an aggregate number of units consisting of: (i) the aggregate number of the Company’s common shares, par value \$0.24 per share (the “**Common Shares**”), set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers (which shall collectively be referred to herein as the “**Purchased Shares**”) and/or pre-funded warrants, in substantially the form attached hereto as Exhibit A (the “**Pre-Funded Warrants**”), to purchase that number of Common Shares set forth opposite such Buyer’s name in column (5) on the Schedule of Buyers (the Common Shares underlying the Pre-Funded Warrants, collectively, the “**Pre-Funded Warrant Shares**”), at an exercise price equal to \$0.0001 per Pre-Funded Warrant Share; which aggregate amount for all Buyers together of Purchased Shares and Pre-Funded Warrant Shares shall be [] shares, (ii) warrants, in substantially the form attached hereto as Exhibit B (the “**Series A Warrants**”), to purchase initially up to that number of Common Shares set forth opposite such Buyer’s name in column (4) on the Schedule of Buyers (the Common Shares underlying the Series A Warrants, collectively, the “**Series A Warrant Shares**”) at an exercise price equal to \$0.75 per each Series A Warrant Share and (iii) warrants, in substantially the form attached hereto as Exhibit C (the “**Series B Warrants**”) and, together with the Pre-Funded Warrants and Series A Warrants, the “**Warrants**”) to purchase initially up to that number of Common Shares set forth therein and exercisable in accordance with its terms and conditions (the Common Shares underlying the Series B Warrants, collectively, the “**Series B Warrant Shares**”) and, together with Pre-Funded Warrant Shares and the Series A Warrant Shares, the “**Warrant Shares**”) at an exercise price equal to \$0.0001 per Series B Warrant Share. The Purchased Shares, the Warrants and the Warrant Shares collectively are referred to herein as the “**Securities**.”

C. Contemporaneously with the execution and delivery of this Agreement, the parties hereto are executing and delivering a Registration Rights Agreement, in substantially the form attached hereto as Exhibit D (the “**Registration Rights Agreement**”), pursuant to which the Company has agreed to provide certain registration rights with respect to the Registrable Securities (as defined in the Registration Rights Agreement) under the 1933 Act and the rules and regulations promulgated thereunder, and applicable state securities laws.

NOW, THEREFORE, in consideration of the foregoing and of the agreements and covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Company and each Buyer hereby agree as follows:

1. PURCHASE AND SALE OF SECURITIES.

(a) Purchase of Purchased Shares and Warrants. Subject to the satisfaction (or waiver) of the conditions set forth in Sections 6 and 7 below, the Company shall issue and sell to each Buyer, and each Buyer severally, but not jointly, agrees to purchase from the Company on the Closing Date (as defined below), (w) the number of Purchased Shares as is set forth opposite such Buyer’s name in column (3) on the Schedule of Buyers,

along with (x) Series A Warrants to acquire up to that number of Series A Warrant Shares as is set forth opposite such Buyer's name in column (4) on the Schedule of Buyers, (y) Series B Warrants to acquire Series B Warrant Shares in accordance with its terms and conditions and (z) Pre-Funded Warrants to acquire up to that number of Pre-Funded Warrant Shares as is set forth opposite such Buyer's name in column (5) on the Schedule of Buyers (the "**Closing**"). Notwithstanding anything herein to the contrary, in no event will any Buyer's voting rights in the Company or ownership of the Company's issued share capital exceed 4.99% of the number of Common Shares outstanding immediately after giving effect to the issuance of the Securities on the Closing Date, and such Buyer shall purchase Pre-Funded Warrants in lieu of the Purchased Shares, as set forth opposite such Buyer's name in column (3) on the Schedule of Buyers.

(b) Closing. The date and time of the Closing (the "**Closing Date**") shall take place remotely via the exchange of documents and signatures, on the date hereof (or such other date and time as is mutually agreed to by the Company and each Buyer) after notification of satisfaction (or waiver) of the conditions to the Closing set forth in Sections 6 and 7 below.

(c) Purchase Price. The purchase price for the Purchased Shares and the related Warrants to be purchased by each Buyer at the Closing shall be the amount set forth opposite such Buyer's name in column (6) of the Schedule of Buyers (the "**Purchase Price**"), which shall be equal to (i) the amount of \$0.50 per Purchased Share and related Warrants and (ii) the amount of \$0.4999 per Pre-Funded Warrant and related Warrants.

(d) Form of Payment. On the Closing Date, (i) each Buyer shall pay its respective Purchase Price to the Company for the Purchased Shares and the Warrants to be issued and sold to such Buyer at the Closing by wire transfer of immediately available funds in accordance with the Company's written wire instructions and (ii) the Company shall deliver to each Buyer (w) book entry statements, evidencing the number of Purchased Shares such Buyer is purchasing as is set forth opposite such Buyer's name in column (3) of the Schedule of Buyers, (x) a Series A Warrant initially exercisable for such number of Series A Warrant Shares as is set forth opposite such Buyer's name in column (4) of the Schedule of Buyers, (y) a Series B Warrant pursuant to which such Buyer shall have the right to purchase Series B Warrant Shares in accordance with its terms and conditions, and (z) a Pre-Funded Warrant pursuant to which such Buyer shall have the right to acquire such number of Pre-Funded Warrant Shares as is set forth opposite such Buyer's name in column (5) of the Schedule of Buyers, in each case duly executed on behalf of the Company and registered in the name of such Buyer or its designee.

2. BUYER'S REPRESENTATIONS AND WARRANTIES. Each Buyer, severally and not jointly, represents and warrants with respect to only itself to the Company that:

(a) No Public Sale or Distribution. Such Buyer is (i) acquiring the Purchased Shares and the Warrants and (ii) upon exercise of the Warrants (other than pursuant to a Cashless Exercise (as defined in the Warrants)) will acquire the Warrant Shares issuable upon exercise of the Warrants, for its own account and not with a view towards, or for resale in connection with, the public sale or distribution thereof in violation of applicable securities laws, except pursuant to sales registered or exempted under the 1933 Act; provided, however, that by making the representations herein, such Buyer does not agree, or make any representation or warranty, to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with or pursuant to a registration statement or an exemption under the 1933 Act. Such Buyer does not presently have any agreement or understanding, directly or indirectly, with any Person to distribute any of the Securities in violation of applicable securities laws. As used herein, "**Person**" means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any governmental entity or any department or agency thereof.

(b) Accredited Investor Status. Such Buyer is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D.

(c) Reliance on Exemptions. Such Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and such Buyer's compliance with, the

representations, warranties, agreements, acknowledgments and understandings of such Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of such Buyer to acquire the Securities.

(d) Information. Such Buyer and its advisors, if any, have been furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities that have been requested by such Buyer. Such Buyer and its advisors, if any, have been afforded the opportunity to ask questions of the Company regarding its business and affairs. For the avoidance of doubt, other than knowledge of the transactions contemplated by this Agreement, the Company has not disclosed to the Buyer any material nonpublic information regarding the Company or otherwise and agrees that it will not disclose such information unless such information is disclosed to the public prior to or promptly following such disclosure to the Buyer. Neither such inquiries nor any other due diligence investigations conducted by such Buyer or its advisors, if any, or its representatives shall modify, amend or affect such Buyer's right to rely on the Company's representations and warranties contained herein. Such Buyer understands that its investment in the Securities involves a high degree of risk. Such Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(e) No Governmental Review. Such Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Resale. Such Buyer understands that except as provided in the Registration Rights Agreement and Section 4(h) hereof: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder, (B) such Buyer shall have delivered to the Company (if requested by the Company) an opinion of counsel, in a generally acceptable form, to the effect that such Securities to be sold, assigned or transferred may be sold, assigned or transferred pursuant to an exemption from such registration, or (C) such Buyer provides the Company with reasonable assurance that such Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A promulgated under the 1933 Act, as amended, (or a successor rule thereto) (collectively, "**Rule 144**"); (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other Person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder. Notwithstanding the foregoing, the Securities may be pledged in connection with a bona fide margin account or other loan or financing arrangement secured by the Securities and such pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Buyer effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document (as defined in Section 3(b)), including, without limitation, this Section 2(f).

(g) Legends. Such Buyer understands that the certificates or other instruments representing the Purchased Shares and the Warrants and, until such time as the resale of the Purchased Shares and the Warrant Shares have been registered under the 1933 Act as contemplated by the Registration Rights Agreement, the stock certificates representing the Warrant Shares, except as set forth below, shall bear a restrictive legend in substantially the following form (and a stop-transfer order may be placed against transfer of such stock certificates):

[NEITHER THE ISSUANCE AND SALE OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE NOR THE SECURITIES INTO WHICH THESE SECURITIES ARE EXERCISABLE HAVE BEEN][THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN] REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED (I) IN THE ABSENCE OF (A) AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED,

OR (B) AN OPINION OF COUNSEL SELECTED BY THE HOLDER, IN A GENERALLY ACCEPTABLE FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR (II) UNLESS SOLD PURSUANT TO RULE 144 OR RULE 144A UNDER SAID ACT. NOTWITHSTANDING THE FOREGOING, THE SECURITIES MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN OR FINANCING ARRANGEMENT SECURED BY THE SECURITIES.

The legend set forth above shall be removed and the Company shall issue a certificate or book entry statement without such legend to the holder of the Securities upon which it is stamped or issue to such holder by electronic delivery at the applicable balance account at The Depository Trust Company (“DTC”), if (i) such Securities are registered for resale under the 1933 Act, (ii) in connection with a sale, assignment or other transfer, such holder provides the Company with an opinion of counsel, in a generally acceptable form, to the effect that such sale, assignment or transfer of the Securities may be made without registration under the applicable requirements of the 1933 Act, or (iii) the Securities can be sold, assigned or transferred pursuant to Rule 144 or Rule 144A. The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with such issuance. If the Company shall fail to cause the transfer agent to issue to the holder of the Securities within two (2) Trading Days (as defined in the Warrants) after the occurrence of any of (i) through (iii) above, a certificate without such legend to such holder or to issue such Securities to such holder by electronic delivery at the applicable balance account at DTC, and if on or after such Trading Day the holder purchases (in an open market transaction or otherwise) Common Shares to deliver in satisfaction of a sale by the holder of such Securities that the holder anticipated receiving without legend from the Company, then the Company shall promptly honor its obligation to deliver to the holder such unlegended Securities as provided above and pay cash to the holder in the amount if any, by which (x) the holder’s total purchase price (including brokerage commissions, if any) for the Common Shares so purchased, exceeds (y) the amount obtained by multiplying (1) such number of Common Shares, times (2) the price at which the sell order giving rise to such purchase obligation was executed, The Company shall be responsible for the fees of its transfer agent and all DTC fees associated with such issuance.

(h) Validity; Enforcement. This Agreement and the Registration Rights Agreement have been duly and validly authorized, executed and delivered on behalf of such Buyer and shall constitute the legal, valid and binding obligations of such Buyer enforceable against such Buyer in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

(i) No Conflicts. The execution, delivery and performance by such Buyer of this Agreement and the Registration Rights Agreement and the consummation by such Buyer of the transactions contemplated hereby and thereby will not (i) result in a violation of the organizational documents of such Buyer or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which such Buyer is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws) applicable to such Buyer, except in the case of clauses (ii) and (iii) above, for such conflicts, defaults, rights or violations which would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the ability of such Buyer to perform its obligations hereunder.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to each of the Buyers that, as of the date hereof and as of the Closing Date:

(a) Organization and Qualification. Each of the Company and each of its “**Subsidiaries**” (which for purposes of this Agreement means any entity in which the Company, directly or indirectly, owns a controlling interest in any of the capital stock or holds an equity or similar interest, including a variable interest entity) are entities duly organized and validly existing and in good standing under the laws of the jurisdiction in which they are formed, and have the requisite power and authorization to own their properties and to carry on their business as now being conducted and as presently proposed to be conducted. Each of the Company and each of its Subsidiaries is duly qualified as a foreign entity to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a Material Adverse Effect. As used in this Agreement, “**Material Adverse Effect**” means any material adverse effect on the business, properties, assets, liabilities, operations, results of operations, condition (financial or otherwise) or prospects of the Company and its Subsidiaries, individually or taken as a whole, or on the transactions contemplated hereby or in any of the other Transaction Documents or any other agreements or instruments to be entered into in connection herewith or therewith, or on the authority or ability of the Company or any of its Subsidiaries to perform any of their respective obligations under any of the Transaction Documents (as defined below). All Subsidiaries of the Company are disclosed in the SEC Documents (as defined below) except as set forth in Schedule 3(a). The outstanding shares of capital stock of each of the Subsidiaries have been duly authorized and validly issued, are fully paid and non-assessable and are owned by the Company or another Subsidiary free and clear of all liens, encumbrances and equities and claims; and no options, warrants or other rights to purchase, agreements or other obligations to issue or other rights to convert any obligations into shares of capital stock or ownership interests in the Subsidiaries are outstanding.

(b) Authorization; Enforcement; Validity. The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Warrants, the Registration Rights Agreement, the Lock-Up Agreements (as defined in Section 7(x)), the Irrevocable Transfer Agent Instructions (as defined in Section 5(b)), and each of the other agreements entered into by the parties hereto in connection with the transactions contemplated by this Agreement (collectively, the “**Transaction Documents**”) and to issue the Securities in accordance with the terms hereof and thereof. The execution and delivery of this Agreement and the other Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby, including, without limitation, the issuance of the Purchased Shares and the Warrants and the reservation for issuance and the issuance of the Warrant Shares issuable upon exercise of the Warrants have been duly authorized by the Company’s Board of Directors and (other than the filing with the SEC of one or more Registration Statements (as defined in the Registration Rights Agreement) in accordance with the requirements of the Registration Rights Agreement, a Form D with the SEC and any other filings as may be required by any state securities agencies and submission of a listing application with Nasdaq if applicable) no further filing, consent or authorization is required by the Company, its Board of Directors or its shareholders. This Agreement and the other Transaction Documents have been duly executed and delivered by the Company, and constitute the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies.

(c) Issuance of Securities. The issuance of the Securities has been duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, the Purchased Shares and the Warrants shall be validly issued and free from all preemptive or similar rights (except for those which have been validly waived prior to the date hereof), taxes, liens and charges and other encumbrances with respect to the issue thereof and the Purchased Shares will be fully paid and nonassessable with the holders being entitled to all rights accorded to a holder of Common Shares. As of the Closing Date, a number of Common Shares shall have been duly authorized and reserved for issuance which equals at least the sum of (i) the maximum number of Common Shares issuable upon exercise of the Series A Warrants, (ii) the maximum number of Common Shares issuable upon exercise of the Pre-Funded Warrants and (iii) the maximum number of Common Shares issuable upon exercise of the Series B Warrants, in each case, without giving effect to any limitation on exercise set forth therein and, with respect to the Series A Warrants, assuming a Reset Price (as defined in the Series A Warrant) equal to \$0.137 (as adjusted for share splits, share dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the date hereof) and with respect to the Series B Warrants, assuming that the Maximum Eligibility

Number (as defined in the Series B Warrant) is determined based on a Reset Price (as defined in the Series B Warrants) equal to \$0.137 (as adjusted for share splits, share dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the date hereof) (the “**Required Reserved Amount**”). Upon exercise of the Warrants in accordance with the Warrants and receipt of the exercise price thereunder, the Warrant Shares when issued will be validly issued, fully paid and nonassessable and free from all preemptive or similar rights, taxes, liens, charges and other encumbrances with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Shares. Assuming the accuracy of each of the representations and warranties set forth in Section 2 of this Agreement, the offer and issuance by the Company of the Securities is exempt from registration under the 1933 Act.

(d) No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Purchased Shares and the Warrants and reservation for issuance and issuance of the Warrant Shares) will not (i) conflict with or result in a violation of the Amended And Restated Memorandum And Articles Of Association or other organizational documents of the Company or any of its Subsidiaries, or any capital stock or other securities of the Company or any of its Subsidiaries, (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) in any respect under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including foreign, federal and state securities laws and regulations and the rules and regulations of The Nasdaq Capital Market, or any of the markets or exchanges on which the Common Shares are primarily listed or quoted for trading (the “**Principal Market**”) and including all applicable foreign, federal, state laws, rules and regulations) applicable to the Company or any of its Subsidiaries or by which any property or asset of the Company or any of its Subsidiaries is bound or affected except, with respect to clauses (ii) and (iii) above, for such conflicts, defaults, terminations, amendments, accelerations, cancellations and violations as would not, individually or in the aggregate, have a Material Adverse Effect.

(e) Consents. Except as disclosed in Schedule 3(e), neither the Company nor any Subsidiary is required to obtain any consent from, authorization or order of, or make any filing or registration with (other than the filing with the SEC of one or more Registration Statements in accordance with the requirements of the Registration Rights Agreement, a Form D with the SEC and any other filings as may be required by any state securities agencies and the filing of required notices and/or applications to the Principal Market for the issuance and sale of the securities hereby), any court, governmental agency (defined for purposes herein as, means any nation, state, county, city, town, village, district, or other political jurisdiction of any nature, federal, state, local, municipal, foreign, or other government, governmental or quasi-governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal), multi-national organization or body; or body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power of any nature or instrumentality of any of the foregoing, including any entity or enterprise owned or controlled by a government or a public international organization or any of the foregoing) or any regulatory or self-regulatory agency or any other Person in order for it to execute, deliver or perform any of their respective obligations under or contemplated by the Transaction Documents, in each case, in accordance with the terms hereof or thereof. All consents, authorizations, orders, filings and registrations which the Company or any of its Subsidiaries is required to obtain pursuant to the preceding sentence have been obtained or effected on or prior to the Closing Date (or in the case of filings detailed above, will be made timely after the Closing Date), and neither the Company nor any of its Subsidiaries is aware of any facts or circumstances which might prevent the Company or any of its Subsidiaries from obtaining or effecting any of the registration, application or filings contemplated by the Transaction Documents. Except with respect to the minimum bid price requirements of the Principal Market, the Company is not in violation of the listing requirements of the Principal Market and has no knowledge of any facts or circumstances which would reasonably lead to delisting or suspension of the Common Shares in the foreseeable future. The issuance by the Company of the Securities shall not have the effect of delisting or suspending the Common Shares from the Principal Market.

(f) Acknowledgment Regarding Buyer's Purchase of Securities. The Company acknowledges and agrees that each Buyer is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby and that no Buyer is (i) an officer or director of the Company or any of its Subsidiaries, (ii) an "affiliate" of the Company or any of its Subsidiaries (as defined in Rule 144) or (iii) to the knowledge of the Company, a "beneficial owner" of more than 10% of the Common Shares (as defined for purposes of Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "1934 Act")). The Company further acknowledges that no Buyer is acting as a financial advisor or fiduciary of the Company or any of its Subsidiaries (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby, and any advice given by a Buyer or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to such Buyer's purchase of the Securities. The Company further represents to each Buyer that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives.

(g) No General Solicitation; Placement Agent's Fees. Neither the Company, nor any of its Subsidiaries or affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Securities. The Company shall be responsible for the payment of the Placement Agent's fees, financial advisory fees, or brokers' commissions (other than for Persons engaged by any Buyer or its investment advisor) relating to or arising out of the transactions contemplated hereby, including, without limitation, placement agent fees payable to Maxim Group LLC (the "**Placement Agent**") in connection with the sale of the Securities. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, attorney's fees and out-of-pocket expenses) arising in connection with any such claim. The Company acknowledges that it has engaged the Placement Agent in connection with the sale of the Securities. Other than the Placement Agent, neither the Company nor any of its Subsidiaries has engaged any placement agent or other agent in connection with the offer or sale of the Securities.

(h) No Integrated Offering. None of the Company, its Subsidiaries or any of their affiliates, nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the issuance of any of the Securities under the 1933 Act, whether through integration with prior offerings or otherwise, or cause this offering of the Securities to require approval of shareholders of the Company for purposes of the 1933 Act or any applicable shareholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated for quotation. None of the Company, its Subsidiaries, their affiliates nor any Person acting on their behalf will take any action or steps that would require registration of the issuance of any of the Securities under the 1933 Act or cause the offering of any of the Securities to be integrated with other offerings of securities of the Company.

(i) Application of Takeover Protections; Rights Agreement. The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any control share acquisition, interested shareholder, business combination, poison pill (including, without limitation, any distribution under a rights agreement) or other similar anti-takeover provision under the Amended And Restated Memorandum And Articles Of Association or other organizational documents or the laws of the jurisdiction of its formation which is or could become applicable to any Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and any Buyer's ownership of the Securities. The Company and its Board of Directors have taken all necessary action, if any, in order to render inapplicable any shareholder rights plan or similar arrangement relating to accumulations of beneficial ownership of Common Shares or a change in control of the Company or any of its Subsidiaries.

(j) SEC Documents; Financial Statements. Since July 18, 2022, the Company has timely filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the

reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof or prior to the Closing Date, and all exhibits and appendices included therein and financial statements, notes and schedules thereto (other than schedules or appendices to such documents permitted to be excluded therefrom) and documents incorporated by reference therein being hereinafter referred to as the “**SEC Documents**”). As of their respective filing dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act applicable to the Company and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of their respective filing dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with the U.S. generally accepted accounting principles (“**GAAP**”) consistently applied during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company and its Subsidiaries as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments which will not be material, either individually or in the aggregate). No other information provided by or on behalf of the Company to any of the Buyers which is not included in the SEC Documents (including, without limitation, information referred to in Section 2(d) of this Agreement or in the disclosure schedules to this Agreement) contains any untrue statement of a material fact or omits to state any material fact necessary in order to make the statements therein, in the light of the circumstance under which they are or were made, not misleading. The Company is not currently contemplating to amend or restate any of the financial statements (including, without limitation, any notes or any letter of the independent accountants of the Company with respect thereto) included in the SEC Documents (the “**Financial Statements**”), nor is the Company currently aware of facts or circumstances which would require the Company to amend or restate any of the Financial Statements, in each case, in order for any of the Financial Statements to be in compliance with GAAP and the rules and regulations of the SEC. The Company has not been informed by its independent accountants that they recommend that the Company amend or restate any of the Financial Statements or that there is any need for the Company to amend or restate any of the Financial Statements.

(k) Absence of Certain Changes. Since December 31, 2022, except as disclosed in Schedule 3(k)(i), there has been no material adverse change and no material adverse development in the business, assets, liabilities, properties, operations, condition (financial or otherwise), results of operations or prospects of the Company or any of its Subsidiaries. Since December 31, 2022, except as disclosed in Schedule 3(k)(ii), neither the Company nor any of its Subsidiaries has (i) declared or paid any dividends, (ii) sold any assets, individually or in the aggregate, in excess of \$100,000 outside of the ordinary course of business or (iii) had capital expenditures, individually or in the aggregate, in excess of \$100,000. Neither the Company nor any of its Subsidiaries has taken any steps to seek protection pursuant to any law or statute relating to bankruptcy, insolvency, reorganization, receivership, liquidation or winding up, nor does the Company or any Subsidiary have any knowledge or reason to believe that any of their respective creditors intend to initiate involuntary bankruptcy proceedings or any actual knowledge of any fact which would reasonably lead a creditor to do so. The Company and its Subsidiaries, individually and on a consolidated basis, are not as of the date hereof, and after giving effect to the transactions contemplated hereby to occur at the Closing, will not be Insolvent (as defined below). For purposes of this Section 3(k), “**Insolvent**” means, (i) with respect to the Company and its Subsidiaries, on a consolidated basis, (A) the present fair saleable value of the Company’s and its Subsidiaries’ assets is less than the amount required to pay the Company’s and its Subsidiaries’ total Indebtedness (as defined below), (B) the Company and its Subsidiaries are unable to pay their debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured or (C) the Company and its Subsidiaries intend to incur or believe that they will incur debts that would be beyond their ability to pay as such debts mature; and (ii) with respect to the Company and each Subsidiary, individually, (A) the present fair saleable value of the Company’s or such Subsidiary’s (as the case may be) assets is less than the amount required to pay its respective total Indebtedness, (B) the Company or such Subsidiary (as the case may be) is unable to pay its respective debts and liabilities, subordinated, contingent or otherwise, as such debts and liabilities become absolute and matured or (C) the Company or such Subsidiary (as the case may be) intends to incur or believes that it will incur debts that would be beyond its respective ability to pay as such debts mature. Neither the Company nor any of its Subsidiaries has engaged in any business or

in any transaction, and is not about to engage in any business or in any transaction, for which the Company's or such Subsidiary's remaining assets constitute unreasonably small capital with which to conduct the business in which it is engaged as such business is now conducted and is proposed to be conducted.

(l) No Undisclosed Events, Liabilities, Developments or Circumstances. No event, liability, development or circumstance has occurred or exists, or is reasonably expected to exist or to occur with respect to the Company, its Subsidiaries or any of their respective businesses, properties, liabilities, prospects, operations (including results thereof) or condition (financial or otherwise), that would be required to be disclosed by the Company under applicable securities laws on Form 6-K or on a registration statement on Form F-1 filed with the SEC relating to an issuance and sale by the Company of its Common Shares and which has not been publicly announced, could have a material adverse effect on any Buyer's investment hereunder or could have a Material Adverse Effect.

(m) Conduct of Business; Regulatory Permits. Neither the Company nor any of its Subsidiaries is in violation of any term of or in default under its Amended And Restated Memorandum And Articles Of Association, any certificate of designations, preferences or rights of any other outstanding series of preferred stock of the Company or any of its Subsidiaries or their organizational charter, certificate of formation or certificate of incorporation or bylaws, respectively. Neither the Company nor any of its Subsidiaries is in violation of any judgment, decree or order or any statute, ordinance, rule or regulation applicable to the Company or any of its Subsidiaries, and neither the Company nor any of its Subsidiaries will conduct its business in violation of any of the foregoing, except in all cases for possible violations which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. The Company and each of its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate foreign, federal or state regulatory authorities necessary to conduct their respective businesses, except where the failure to possess such certificates, authorizations or permits would not have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit. There is no agreement, commitment, judgment, injunction, order or decree binding upon the Company or any of its Subsidiaries or to which the Company or any of its Subsidiaries is a party which has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of the Company or any of its Subsidiaries, any acquisition of property by the Company or any of its Subsidiaries or the conduct of business by the Company or any of its Subsidiaries as currently conducted other than such effects, individually or in the aggregate, which have not had and would not reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries. Without limiting the generality of the foregoing, except as disclosed in the Company's SEC Documents, the Company is not in violation of any of the rules, regulations or requirements of the Principal Market and has no knowledge of any facts or circumstances that would reasonably lead to delisting or suspension of the Common Shares by the Principal Market in the foreseeable future. For the two years preceding the date hereof, (i) the Common Shares have been listed or designated for quotation on the Principal Market, (ii) trading in the Common Shares have not been suspended by the SEC or the Principal Market and (iii) except as disclosed in the Company's SEC Documents, the Company has received no communication, written or oral, from the SEC or the Principal Market regarding the suspension or delisting of the Common Shares from the Principal Market.

(n) Foreign Corrupt Practices. Neither the Company, the Company's subsidiary or any director, officer, agent, employee, nor any other person acting for or on behalf of the Company or the Company's subsidiaries (individually and collectively, a "**Company Affiliate**") have violated the U.S. Foreign Corrupt Practices Act (the "**FCPA**") or any other applicable anti-bribery or anti-corruption laws, nor has any Company Affiliate offered, paid, promised to pay, or authorized the payment of any money, or offered, given, promised to give, or authorized the giving of anything of value, to any officer, employee or any other person acting in an official capacity for any Governmental Entity to any political party or official thereof or to any candidate for political office (individually and collectively, a "**Government Official**") or to any person under circumstances where such Company Affiliate knew or was aware of a high probability that all or a portion of such money or thing of value would be offered, given or promised, directly or indirectly, to any Government Official, for the purpose of: (i) (A) influencing any act or decision of such Government Official in his/her official capacity, (B) inducing such Government Official to do or omit to do any act in violation of his/her lawful duty, (C) securing any improper advantage, or (D) inducing such Government Official to influence or affect any act or decision of any Governmental Entity, (ii) or assisting the Company or its Subsidiaries in obtaining or retaining business for or with, or directing business to, the Company or its Subsidiaries.

(o) Sarbanes-Oxley Act. The Company is in compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002, as amended, that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the SEC thereunder that are effective as of the date hereof to the extent applicable to the Company.

(p) Transactions With Affiliates. Except as disclosed in the Company's SEC Documents or as described in Schedule (3)(p)(i), no current or former employee, director, officer or major stockholder (direct or indirect) of the Company or its Subsidiaries, or, to the knowledge of the Company, any affiliate of any thereof, is presently, or has ever been, (i) a party to any transaction with the Company or its Subsidiaries (including any contract, agreement or other arrangement providing for the furnishing of services by, or rental of real or personal property from, or otherwise requiring payments to, any such director, officer or stockholder or such associate or affiliate or relative Subsidiaries (other than for ordinary course services as employees, officers or directors of the Company or any of its Subsidiaries)) or (ii) the direct or indirect owner of an interest in any corporation, firm, association or business organization which is a competitor, supplier or customer of the Company or its Subsidiaries (except for a passive investment (direct or indirect) in less than 5% of the common stock of a company whose securities are traded on or quoted through an Eligible Market (as defined in the Warrants)), nor does any such Person receive income from any source other than the Company or its Subsidiaries which relates to the business of the Company or its Subsidiaries or should properly accrue to the Company or its Subsidiaries. Except as disclosed in the Company's SEC Documents or in Schedule (3)(p)(ii), no employee, officer, stockholder or director of the Company or any of its Subsidiaries or member of his or her immediate family is indebted to the Company or its Subsidiaries, as the case may be, nor is the Company or any of its Subsidiaries indebted (or committed to make loans or extend or guarantee credit) to any of them, other than (i) for payment of salary or compensation for services rendered, (ii) reimbursement for reasonable expenses incurred on behalf of the Company, and (iii) for other standard employee benefits made generally available to all employees or executives (including stock option agreements outstanding under any stock option plan approved by the Board of Directors of the Company).

(q) Equity Capitalization. As of the date hereof, the authorized share capital stock of the Company consists of 500,000,000 Common Shares, of which as of the date hereof, 4,094,589 are issued and outstanding, 169,000 shares are reserved for issuance pursuant to the Company's stock option and purchase plans and 2,863,317 shares are reserved for issuance pursuant to securities (other than the aforementioned options and Warrants) exercisable or exchangeable for, or convertible into, Common Shares and no preferred shares. No Common Shares are held in treasury. All of such outstanding shares are duly authorized and have been, or upon issuance will be, validly issued, fully paid and nonassessable. 45,826 of the Company's issued and outstanding Common Shares on the date hereof are as of the date hereof owned by Persons who are "affiliates" (as defined in Rule 405 of the 1933 Act and calculated based on the assumption that only officers, directors and holders of at least 10% of the Company's issued and outstanding Common Stock are "affiliates" without conceding that any such Persons are "affiliates" for purposes of federal securities laws) of the Company or any of its Subsidiaries. To the Company's knowledge, no Person owns 10% or more of the Company's issued and outstanding Common Shares (calculated based on the assumption that all Convertible Securities (as defined below), whether or not presently exercisable or convertible, have been fully exercised or converted (as the case may be) taking account of any limitations on exercise or conversion (including "blockers") contained therein without conceding that such identified Person is a 10% stockholder for purposes of federal securities laws). (i) Except as disclosed in the SEC Documents, none of the Company's or any Subsidiary's capital stock is subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company or any Subsidiary; (ii) except as disclosed in the SEC Documents, there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, or exercisable or exchangeable for, any capital stock of the Company or any of its Subsidiaries; (iii) except as disclosed in the SEC Documents or in Schedule 3(q)(i), there are no outstanding debt securities, notes, credit agreements, credit facilities or other agreements, documents or instruments evidencing Indebtedness of the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries is or

may become bound; (iv) except as disclosed in as disclosed in the SEC Documents, there are no financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries; (v), except as disclosed in the SEC Documents or in Schedule 3(q)(ii), there are no agreements or arrangements (other than pursuant to the Registration Rights Agreement) under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the 1933 Act; (vi) except as disclosed in the SEC Documents, there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries; (vii) except as disclosed in the SEC Documents, there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities; (viii) except as disclosed in the SEC Documents, neither the Company nor any Subsidiary has any stock appreciation rights or “phantom stock” plans or agreements or any similar plan or agreement; and (ix) neither the Company nor any of its Subsidiaries have any liabilities or obligations required to be disclosed in the SEC Documents which are not so disclosed in the SEC Documents, other than those incurred in the ordinary course of the Company’s or its Subsidiaries’ respective businesses and which, individually or in the aggregate, do not or could not have a Material Adverse Effect. True, correct and complete copies of the Company’s Memorandum And Articles Of Association, as amended and as in effect on the date hereof (the “**Amended And Restated Memorandum And Articles Of Association**”), and the terms of all securities convertible into, or exercisable or exchangeable for, Common Shares and the material rights of the holders thereof in respect thereto have heretofore been filed as part of the SEC Documents.

(r) Indebtedness and Other Contracts. Except as described in Schedule 3(r), neither the Company nor any of its Subsidiaries, (i) except as disclosed in the SEC Documents, has any outstanding Indebtedness (as defined below), (ii) except as disclosed in the SEC Documents, is a party to any contract, agreement or instrument, the violation of which, or default under which, by the other party(ies) to such contract, agreement or instrument would reasonably be expected to result in a Material Adverse Effect, (iii) except as disclosed in the SEC Documents, is in violation of any term of, or in default under, any contract, agreement or instrument relating to any Indebtedness, except where such violations and defaults would not result, individually or in the aggregate, in a Material Adverse Effect, (iv) has any financing statements securing obligations in any amounts filed in connection with the Company or any of its Subsidiaries or (v) except as disclosed in the SEC Documents, is a party to any contract, agreement or instrument relating to any Indebtedness, the performance of which, in the judgment of the Company’s officers, has or is expected to have a Material Adverse Effect. For purposes of this Agreement: (x) “**Indebtedness**” of any Person means, without duplication (A) all indebtedness for borrowed money, (B) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (including, without limitation, “finance leases” in accordance with GAAP, consistently applied during the periods involved) (other than trade payables entered into in the ordinary course of business consistent with past practice), (C) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (D) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced incurred in connection with the acquisition of property, assets or businesses, (E) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (F) all monetary obligations under any leasing or similar arrangement which, in connection with GAAP, consistently applied for the periods covered thereby, is classified as a finance lease, (G) all indebtedness referred to in clauses (A) through (F) above secured by (or for which the holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any mortgage, claim, lien, tax, right of first refusal, pledge, charge, security interest or other encumbrance upon or in any property or assets (including accounts and contract rights) owned by any Person, even though the Person which owns such assets or property has not assumed or become liable for the payment of such indebtedness, and (H) all Contingent Obligations in respect of indebtedness or obligations of others of the kinds referred to in clauses (A) through (G) above; and (y) “**Contingent Obligation**” means, as to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to any indebtedness, finance lease, dividend or other obligation of another Person if the primary purpose or intent of the Person incurring such liability, or the primary effect thereof, is to provide assurance to the obligee of such liability that such liability will be paid or discharged, or that any agreements relating thereto will be complied with, or that the holders of such liability will be protected (in whole or in part) against loss with respect thereto.

(s) Absence of Litigation. There is no action, suit, arbitration, proceeding, inquiry or investigation before or by the Principal Market, any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its Subsidiaries, the Common Shares or any of the Company's Subsidiaries or any of the Company's or its Subsidiaries' officers or directors, whether of a civil or criminal nature or otherwise, in their capacities as such, except as disclosed in the SEC Documents. Without limitation of the foregoing, there has not been, and to the knowledge of the Company, there is not pending or contemplated, any investigation by the SEC involving the Company, any of its Subsidiaries or any current or former director or officer of the Company or any of its Subsidiaries. The SEC has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the 1933 Act or the 1934 Act. After reasonable inquiry of its employees, the Company is not aware of any fact which might result in or form the basis for any such action, suit, arbitration, investigation, inquiry or other proceeding. Neither the Company nor any of its Subsidiaries is subject to any order, writ, judgment, injunction, decree, determination or award of any Governmental Entity.

(t) Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary has any reason to believe that it will be unable to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

(u) Employee Relations. Neither the Company nor any of its Subsidiaries is a party to any collective bargaining agreement or employs any member of a union. The Company believes that its and its Subsidiaries' relations with their respective employees are good. No executive officer (as defined in Rule 501(f) promulgated under the 1933 Act) or other key employee of the Company or any of its Subsidiaries has notified the Company or any such Subsidiary that such officer intends to leave the Company or any such Subsidiary or otherwise terminate such officer's employment with the Company or any such Subsidiary. No executive officer or other key employee of the Company or any of its Subsidiaries is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement, non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer or other key employee (as the case may be) does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters. The Company and its Subsidiaries are in compliance with all federal, state, local and foreign laws and regulations respecting labor, employment and employment practices and benefits, terms and conditions of employment and wages and hours, except where failure to be in compliance would not, either individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

(v) Title over Real Property and Fixtures and Equipment. Each of the Company and its Subsidiaries holds good title to all real property, leases in real property, facilities or other interests in real property owned or held by the Company or any of its Subsidiaries (the "**Real Property**") owned by the Company or any of its Subsidiaries (as applicable). The Real Property is free and clear of all Liens and is not subject to any rights of way, building use restrictions, exceptions, variances, reservations, or limitations of any nature except for (a) Liens for current taxes not yet due and (b) zoning laws and other land use restrictions that do not impair the present or anticipated use of the property subject thereto. Any Real Property held under lease by the Company or any of its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company or any of its Subsidiaries. Each of the Company and its Subsidiaries (as applicable) has good title to, or a valid leasehold interest in, the tangible personal property, equipment, improvements, fixtures, and other personal property and appurtenances that are used by the Company or its Subsidiary in connection with the conduct of its business (the "**Fixtures and Equipment**").

The Fixtures and Equipment are structurally sound, are in good operating condition and repair, are adequate for the uses to which they are being put, are not in need of maintenance or repairs except for ordinary, routine maintenance and repairs and are sufficient for the conduct of the Company's and/or its Subsidiaries' businesses (as applicable) in the manner as conducted prior to the Closing. Each of the Company and its Subsidiaries owns all of its Fixtures and Equipment free and clear of all Liens except for (a) liens for current taxes not yet due and (b) zoning laws and other land use restrictions that do not impair the present or anticipated use of the property subject thereto.

(w) Intellectual Property Rights. The Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, original works of authorship, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights and all applications and registrations therefor ("**Intellectual Property Rights**") necessary to conduct their respective businesses as now conducted and as presently proposed to be conducted. Except as disclosed in the SEC Documents, none of the Company's or its Subsidiaries' Intellectual Property Rights have expired, terminated or been abandoned, or are expected to expire, terminate or be abandoned, within three years from the date of this Agreement. The Company has no knowledge of any infringement by the Company or any of its Subsidiaries of Intellectual Property Rights of others. There is no claim, action or proceeding being made or brought, or to the knowledge of the Company or any of its Subsidiaries, being threatened, against the Company or any of its Subsidiaries regarding their Intellectual Property Rights. The Company is not aware of any facts or circumstances which might give rise to any of the foregoing infringements or claims, actions or proceedings. The Company and each of its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their Intellectual Property Rights.

(x) Environmental Laws. The Company and its Subsidiaries (A) are in compliance with all Environmental Laws (as defined below), (B) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (C) are in compliance with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (A), (B) and (C), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. The term "**Environmental Laws**" means all federal, state, local or foreign laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "**Hazardous Materials**") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder. No Hazardous Materials (A) have been disposed of or otherwise released from any Real Property of the Company or any of its Subsidiaries in violation of any Environmental Laws; or (B) are present on, over, beneath, in or upon any Real Property or any portion thereof in quantities that would constitute a violation of any Environmental Laws. No prior use by the Company or any of its Subsidiaries of any Real Property has occurred that violates any Environmental Laws, which violation would have a material adverse effect on the business of the Company or any of its Subsidiaries. Neither the Company nor any of its Subsidiaries knows of any other person who or entity which has stored, treated, recycled, disposed of or otherwise located on any Real Property any Hazardous Materials, including, without limitation, such substances as asbestos and polychlorinated biphenyls. None of the Real Properties are on any federal or state "Superfund" list or Liability Information System ("**CERCLIS**") list or any state environmental agency list of sites under consideration for CERCLIS, nor subject to any environmental related Liens.

(y) Subsidiary Rights. The Company or one of its Subsidiaries has the right to vote, and (subject to limitations imposed by applicable law or the Subsidiaries charter documents) to receive dividends and distributions on, all capital securities of its Subsidiaries as owned by the Company or such Subsidiary.

(z) Tax Status. Except as disclosed in the SEC Documents, the Company and each of its Subsidiaries (i) has timely made or filed all foreign, federal and state income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has timely paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations,

except those being contested in good faith and (iii) has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. Except as disclosed in the SEC Documents, there are no unpaid taxes in any material amount claimed in writing to be due by the taxing authority of any jurisdiction, and according to the best knowledge of the officers of the Company and its Subsidiaries, there is no basis for any such claim. The Company is not operated in such a manner as to qualify as a passive foreign investment company, as defined in Section 1297 of the Code. The net operating loss carryforwards (“NOLs”) for United States federal income tax purposes of the consolidated group of which the Company is the common parent, if any, shall not be adversely effected by the transactions contemplated hereby. The transactions contemplated hereby do not constitute an “ownership change” within the meaning of Section 382 of the Code, thereby preserving the Company’s ability to utilize such NOLs

(aa) Internal Accounting and Disclosure Controls. The Company and each of its Subsidiaries maintains internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the 1934 Act) that is sufficient to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, including that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset and liability accountability, (iii) access to assets or incurrence of liabilities is permitted only in accordance with management’s general or specific authorization and (iv) the recorded accountability for assets and liabilities is compared with the existing assets and liabilities at reasonable intervals and appropriate action is taken with respect to any difference. The Company maintains disclosure controls and procedures (as such term is defined in Rule 13a-15(e) under the 1934 Act) that are sufficient in ensuring that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the SEC, including, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the 1934 Act is accumulated and communicated to the Company’s management, including its principal executive officer or officers and its principal financial officer or officers, as appropriate, to allow timely decisions regarding required disclosure. Except as disclosed in the SEC Documents, neither the Company nor any of its Subsidiaries has received any notice or correspondence from any accountant, Governmental Entity or other Person relating to any potential material weakness or significant deficiency in any part of the internal controls over financial reporting of the Company or any of its Subsidiaries.

(bb) Off Balance Sheet Arrangements. There is no transaction, arrangement, or other relationship between the Company or any of its Subsidiaries and an unconsolidated or other off balance sheet entity that is required to be disclosed by the Company in its 1934 Act filings and is not so disclosed or that otherwise would be reasonably likely to have a Material Adverse Effect.

(cc) Investment Company Status. Neither the Company nor any of its Subsidiaries is, and upon consummation of the sale of the Securities, and for so long as any Buyer holds any Securities, will not be, an “investment company,” an affiliate of an “investment company,” a company controlled by an “investment company” or an “affiliated person” of, or “promoter” or “principal underwriter” for, an “investment company” as such terms are defined in the Investment Company Act of 1940, as amended.

(dd) Acknowledgement Regarding Buyers’ Trading Activity. It is understood and acknowledged by the Company that (i) following the public disclosure of the transactions contemplated by the Transaction Documents, in accordance with the terms thereof, none of the Buyers have been asked by the Company or any of its Subsidiaries to agree, nor has any Buyer agreed with the Company or any of its Subsidiaries, to desist from effecting any transactions in or with respect to (including, without limitation, purchasing or selling, long and/or short) any securities of the Company, or “derivative” securities based on securities issued by the Company or to hold any of the Securities for any specified term; (ii) any Buyer, and counterparties in “derivative” transactions to which any such Buyer is a party, directly or indirectly, presently may have a “short” position in the Common Shares which was established prior to such Buyer’s knowledge of the transactions contemplated by the Transaction Documents; (iii) each Buyer shall not be deemed to have any affiliation with or control over any arm’s length counterparty in any “derivative” transaction; and (iv) each Buyer may rely on the Company’s obligation to timely deliver Common Shares upon conversion, exercise or

exchange, as applicable, of the Securities as and when required pursuant to the Transaction Documents for purposes of effecting trading in the Common Shares of the Company. The Company further understands and acknowledges that following the public disclosure of the transactions contemplated by the Transaction Documents pursuant to the Press Release (as defined below) one or more Buyers may engage in hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable Common Shares) at various times during the period that the Securities are outstanding, including, without limitation, during the periods that the value and/or number of the Warrant Shares \ deliverable with respect to the Securities are being determined and such hedging and/or trading activities (including, without limitation, the location and/or reservation of borrowable Common Shares), if any, can reduce the value of the existing stockholders' equity interest in the Company both at and after the time the hedging and/or trading activities are being conducted. The Company acknowledges that such aforementioned hedging and/or trading activities do not constitute a breach of this Agreement, the Warrants or any other Transaction Document or any of the documents executed in connection herewith or therewith.

(ee) Manipulation of Price. Neither the Company nor any of its Subsidiaries has, and, to the knowledge of the Company, no Person acting on their behalf has, directly or indirectly, (i) taken any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company or any of its Subsidiaries to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or paid any compensation for soliciting purchases of, any of the Securities (other than the Placement Agent), (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company or any of its Subsidiaries or (iv) paid or agreed to pay any Person for research services with respect to any securities of the Company or any of its Subsidiaries.

(ff) U.S. Real Property Holding Corporation. Neither the Company nor any of its Subsidiaries is, or has ever been, and so long as any of the Securities are held by any of the Buyers, shall become, a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company and each Subsidiary shall so certify upon any Buyer's request.

(gg) Eligibility for Registration; Shell Company Status. The Company is eligible to register the Purchased Shares and the Warrant Shares for resale by the Buyers using Form F-1 or Form F-3 promulgated under the 1933 Act. The Company is not, and has never been, an issuer identified in, or subject to, Rule 144(i).

(hh) Transfer Taxes. On the Closing Date, all stock transfer or other taxes (other than income or similar taxes) which are required to be paid in connection with the issuance, sale and transfer of the Securities to be sold to each Buyer hereunder will be, or will have been, fully paid or provided for by the Company, and all laws imposing such taxes will be or will have been complied with.

(ii) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(jj) Compliance with Anti-Money Laundering Laws. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements and all other applicable U.S. and non-U.S. anti-money laundering laws, rules and regulations, including, but not limited to, those of the Currency and Foreign Transactions Reporting Act of 1970, as amended,

the United States Bank Secrecy Act, as amended by the USA PATRIOT Act of 2001, and the United States Money Laundering Control Act of 1986 (18 U.S.C. §§1956 and 1957), as amended, as well as the implementing rules and regulations promulgated thereunder, and the applicable money laundering statutes of all applicable jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency or self-regulatory body (collectively, the “**Anti-Money Laundering Laws**”), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its Subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(kk) No Conflicts with Sanctions Laws. Neither the Company nor any of its Subsidiaries, nor any director, officer, employee, agent, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries or affiliates is, or is directly or indirectly owned or controlled by, a Person that is currently the subject or the target of any sanctions administered or enforced by the U.S. government (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury (“**OFAC**”) or the U.S. Departments of State or Commerce and including, without limitation, the designation as a “Specially Designated National” or on the “Sectoral Sanctions Identifications List”, collectively “Blocked Persons”), the United Nations Security Council, the European Union, Her Majesty’s Treasury or any other relevant sanctions authority (collectively, “**Sanctions Laws**”); neither the Company, any of its Subsidiaries, nor any director, officer, employee, agent, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries or affiliates, is located, organized or resident in a country or territory that is the subject or target of a comprehensive embargo or Sanctions Laws prohibiting trade with the country or territory, including, without limitation, Crimea, Cuba, Iran, North Korea, Sudan and Syria (each, a “**Sanctioned Country**”); the Company maintains in effect and enforces policies and procedures designed to ensure compliance by the Company and its Subsidiaries with applicable Sanctions Laws; neither the Company, any of its Subsidiaries, nor any director, officer, employee, agent, affiliate or other person associated with or acting on behalf of the Company or any of its Subsidiaries or affiliates, acting in any capacity in connection with the operations of the Company, conducts any business with or for the benefit of any Blocked Person or engages in making or receiving any contribution of funds, goods or services to, from or for the benefit of any Blocked Person, or deals in, or otherwise engages in any transaction relating to, any property or interests in property blocked or subject to blocking pursuant to any applicable Sanctions Laws; no action of the Company or any of its Subsidiaries in connection with (i) the execution, delivery and performance of this Agreement and the other Transaction Documents, (ii) the issuance and sale of the Securities, or (iii) the direct or indirect use of proceeds from the Securities or the consummation of any other transaction contemplated hereby or by the other Transaction Documents or the fulfillment of the terms hereof or thereof, will result in the proceeds of the transactions contemplated hereby and by the other Transaction Documents being used, or loaned, contributed or otherwise made available, directly or indirectly, to any Subsidiary, joint venture partner or other person or entity, for the purpose of (i) unlawfully funding or facilitating any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions Laws, (ii) unlawfully funding or facilitating any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions Laws. For the past five (5) years, the Company and its Subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions Laws or with any Sanctioned Country.

(ll) Anti-Bribery. Neither the Company nor any of the Subsidiaries has made any contribution or other payment to any official of, or candidate for, any federal, state or foreign office in violation of any law. Neither the Company, nor any of its Subsidiaries or affiliates, nor any director, officer, agent, employee or other person associated with or acting on behalf of the Company, or any of its Subsidiaries or affiliates, has (i) used any funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity, (ii) made any direct or indirect unlawful payment to any foreign or domestic government official or employee, to any employee or agent of a private entity with which the Company does or seeks to do business or to foreign or domestic political parties or campaigns, (iii) violated or is in violation of any provision of any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions or any applicable provision of the U.S. Foreign Corrupt Practices Act of 1977, as amended (the “**FCPA**”), the U.K. Bribery Act 2010, or any other similar law of any other jurisdiction in which the Company operates its business,

including, in each case, the rules and regulations thereunder (the “**Anti-Bribery Laws**”), (iv) taken, is currently taking or will take any action in furtherance of an offer, payment, gift or anything else of value, directly or indirectly, to any person while knowing that all or some portion of the money or value will be offered, given or promised to anyone to improperly influence official action, to obtain or retain business or otherwise to secure any improper advantage or (v) otherwise made any offer, bribe, rebate, payoff, influence payment, unlawful kickback or other unlawful payment; the Company and each of its respective Subsidiaries has instituted and has maintained, and will continue to maintain, policies and procedures reasonably designed to promote and achieve compliance with the laws referred to in (iii) above and with this representation and warranty; none of the Company, nor any of its Subsidiaries or affiliates will directly or indirectly use the proceeds of the convertible securities or lend, contribute or otherwise make available such proceeds to any subsidiary, affiliate, joint venture partner or other person or entity for the purpose of financing or facilitating any activity that would violate the laws and regulations referred to in (iii) above; there are, and have been, no allegations, investigations or inquiries with regard to a potential violation of any Anti-Bribery Laws by the Company, its Subsidiaries or affiliates, or any of their respective current or former directors, officers, employees, shareholders, representatives or agents, or other persons acting or purporting to act on their behalf.

(mm) No Additional Agreements. The Company does not have any agreement or understanding with any Buyer with respect to the transactions contemplated by the Transaction Documents other than as specified in the Transaction Documents.

(nn) Disclosure. Except for discussions specifically regarding the offer and sale of the Securities, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Buyers or their agents or counsel with any information that constitutes or could reasonably be expected to constitute material, non-public information concerning the Company or any of its Subsidiaries, other than the existence of the transactions contemplated by this Agreement and the other Transaction Documents. The Company understands and confirms that each of the Buyers will rely on the foregoing representations in effecting transactions in securities of the Company. All disclosure provided to the Buyers regarding the Company and its Subsidiaries, their businesses and the transactions contemplated hereby, including the schedules to this Agreement, furnished by or on behalf of the Company or any of its Subsidiaries is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. All of the written information furnished after the date hereof by or on behalf of the Company or any of its Subsidiaries to you pursuant to or in connection with this Agreement and the other Transaction Documents, taken as a whole, will be true and correct in all material respects as of the date on which such information is so provided and will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they are made, not misleading. Each press release issued by the Company or any of its Subsidiaries during the twelve (12) months preceding the date of this Agreement did not at the time of release contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. No event or circumstance has occurred or information exists with respect to the Company or any of its Subsidiaries or its or their business, properties, liabilities, prospects, operations (including results thereof) or conditions (financial or otherwise), which, under applicable law, rule or regulation, requires public disclosure at or before the date hereof or announcement by the Company but which has not been so publicly disclosed. All financial projections and forecasts that have been prepared by or on behalf of the Company or any of its Subsidiaries and made available to you have been prepared in good faith based upon reasonable assumptions and represented, at the time each such financial projection or forecast was delivered to each Buyer, the Company’s best estimate of future financial performance (it being recognized that such financial projections or forecasts are not to be viewed as facts and that the actual results during the period or periods covered by any such financial projections or forecasts may differ from the projected or forecasted results). The Company acknowledges and agrees that no Buyer makes or has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 2.

(oo) Stock Option Plans. Each stock option granted by the Company was granted (i) in accordance with the terms of the applicable Company stock option plan and (ii) with an exercise price at least equal to the fair market value of the Common Shares on the date such stock option would be considered granted under GAAP, consistently applied during the periods involved and applicable law. No stock option granted under the Company’s

stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(pp) No Disagreements with Accountants and Lawyers. There are no material disagreements of any kind presently existing, or reasonably anticipated by the Company to arise, between the Company and the accountants and lawyers formerly or presently employed by the Company and the Company is current with respect to any fees owed to its accountants and lawyers which could affect the Company's ability to perform any of its obligations under any of the Transaction Documents.

(qq) No Disqualification Events. With respect to Securities to be offered and sold hereunder in reliance on Rule 506(b) under the 1933 Act ("**Regulation D Securities**"), none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the 1933 Act) connected with the Company in any capacity at the time of sale (each, an "**Issuer Covered Person**" and, together, "**Issuer Covered Persons**") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the 1933 Act (a "**Disqualification Event**"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Buyers a copy of any disclosures provided thereunder.

(rr) Other Covered Persons. The Company is not aware of any Person (other than the Placement Agent) that has been or will be paid (directly or indirectly) remuneration for solicitation of Buyers or potential purchasers in connection with the sale of any Regulation D Securities.

(ss) Dilutive Effect. The Company understands and acknowledges that the number of Warrant Shares issuable pursuant to terms of the Warrants will increase in certain circumstances. The Company further acknowledges that its obligation to issue Warrant Shares pursuant to the terms of the Warrants in accordance with this Agreement and the Warrants is absolute and unconditional regardless of the dilutive effect that such issuance may have on the ownership interests of other shareholders of the Company.

(tt) Cybersecurity. (i)(x) To the best of the Company's knowledge, there has been no security breach or other compromise of or relating to any of the Company's or any Subsidiary's information technology and computer systems, networks, hardware, software, data (including the data of its respective customers, employees, suppliers, vendors and any third party data maintained by or on behalf of it), equipment or technology (collectively, "IT Systems and Data") and (y) the Company and the Subsidiaries have not been notified of, and has no knowledge of any event or condition that would reasonably be expected to result in, any security breach or other compromise to its IT Systems and Data; (ii) the Company and the Subsidiaries are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification, except as would not, individually or in the aggregate, have a Material Adverse Effect; (iii) the Company and the Subsidiaries have implemented and maintained commercially reasonable safeguards to maintain and protect its material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data; and (iv) the Company and the Subsidiaries have implemented backup and disaster recovery technology consistent with industry standards and practices.

(uu) Compliance with Data Privacy Laws. (i) The Company and the Subsidiaries are, and at all times during the last three (3) years were, in material compliance with all applicable state, federal and foreign data privacy and security laws and regulations, including, without limitation, the European Union General Data Protection Regulation (“GDPR”) (EU 2016/679) (collectively, “Privacy Laws”); (ii) the Company and the Subsidiaries have in place, comply with, and take appropriate steps reasonably designed to ensure compliance with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling and analysis of Personal Data (as defined below) (the “Policies”); (iii) the Company provides accurate notice of its applicable Policies to its customers, employees, third party vendors and representatives as required by the Privacy Laws; and (iv) applicable Policies provide accurate and sufficient notice of the Company’s then-current privacy practices relating to its subject matter, and do not contain any material omissions of the Company’s then-current privacy practices, as required by Privacy Laws. “Personal Data” means (i) a natural person’s name, street address, telephone number, email address, photograph, social security number, bank information, or customer or account number; (ii) any information which would qualify as “personally identifying information” under the Federal Trade Commission Act, as amended; (iii) “personal data” as defined by GDPR; and (iv) any other piece of information that allows the identification of such natural person, or his or her family, or permits the collection or analysis of any identifiable data related to an identified person’s health or sexual orientation. (i) None of such disclosures made or contained in any of the Policies have been inaccurate, misleading, or deceptive in violation of any Privacy Laws and (ii) the execution, delivery and performance of the Transaction Documents will not result in a breach of any Privacy Laws or Policies. Neither the Company nor the Subsidiaries (i) to the knowledge of the Company, has received written notice of any actual or potential liability of the Company or the Subsidiaries under, or actual or potential violation by the Company or the Subsidiaries of, any of the Privacy Laws; (ii) is currently conducting or paying for, in whole or in part, any investigation, remediation or other corrective action pursuant to any regulatory request or demand pursuant to any Privacy Law; or (iii) is a party to any order, decree, or agreement by or with any court or arbitrator or governmental or regulatory authority that imposed any obligation or liability under any Privacy Law.

(vv) PRC Related Representations. Each of the Company and its Subsidiaries has complied, and has taken all steps to ensure compliance, in material respects, by each of its shareholders, directors and officers that is, or is directly or indirectly owned or controlled by, a PRC resident or citizen with any applicable rules and regulations of the relevant PRC government agencies in effect on the applicable Closing Date (including but not limited to the Ministry of Commerce, the National Development and Reform Commission, the China Securities Regulatory Commission (“CSRC”) and the State Administration of Foreign Exchange) (the “SAFE”) relating to overseas investment by PRC residents and citizens (the “PRC Overseas Investment and Listing Regulations”), including, requesting each such person that is, or is directly or indirectly owned or controlled by, a PRC resident or citizen to complete any registration and other procedures required under applicable PRC Overseas Investment and Listing Regulations (including any applicable rules and regulations of the SAFE). The Company is aware of and has been advised as to the content of the Provisions on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors and any official clarifications, guidance, interpretations, implementation rules, revisions in connection with or related thereto in effect on the applicable Closing Date (the “PRC Mergers and Acquisitions Rules”) jointly promulgated by the Ministry of Commerce, the State Assets Supervision and Administration Commission, the State Tax Administration, the State Administration of Industry and Commerce, the CSRC and the State Administration of Foreign Exchange on August 8, 2006, including the provisions thereof which purport to require offshore special purpose entities formed for listing purposes and controlled directly or indirectly by PRC companies or individuals to obtain the approval of the CSRC prior to the listing and trading of their securities on an overseas stock exchange. The Company has received legal advice specifically with respect to the PRC Mergers and Acquisitions Rules from its PRC counsel, and the Company understands such legal advice. In addition, the Company has communicated such legal advice in full to each of its directors and each such director has confirmed that he or she understands such legal advice. The issuance and sale of the Securities, the listing and trading of the Securities on and the consummation of the transactions contemplated by this Agreement and the other Transaction Documents (A) are not and will not be, as of the date hereof or at the applicable Closing Date, as the case may be, adversely affected by the PRC Mergers and Acquisitions Rules and (B) do not require the prior approval of the CSRC.

(ww) No Immunity. None of the Company or its Subsidiaries or any of their respective properties, assets or revenues has any right of immunity, under the laws of Hong Kong, the PRC or the State of New York, from any legal action, suit or proceeding, the giving of any relief in any such legal action, suit or proceeding, set-

off or counterclaim, the jurisdiction of any Hong Kong, the PRC, New York or United States federal court, service of process, attachment upon or prior to judgment, or attachment in aid of execution of judgment, or execution of a judgment, or other legal process or proceeding for the giving of any relief or for the enforcement of a judgment, in any such court, with respect to its obligations, liabilities or any other matter under or arising out of or in connection with this Agreement or the Representative's Warrants; and, to the extent that the Company or any of its Subsidiaries or any of their respective properties, assets or revenues may have or may hereafter become entitled to any such right of immunity in any such court in which proceedings may at any time be commenced, each of the Company and its Subsidiaries waives or will waive such right to the extent permitted by law and has consented to such relief and enforcement as provided in this Agreement and the Representative's Warrants.

(xx) Validity of Choice of Law. The choice of the laws of the State of New York as the governing law of this Agreement and the Transaction Documents is a valid choice of law under the laws of the British Virgin Islands and the PRC and will be honored by courts in the British Virgin Islands and the PRC. The Company has the power to submit, and pursuant to this Agreement and the other Transaction Documents, has legally, validly, effectively and irrevocably submitted, to the personal jurisdiction of each of the State of New York and United States Federal court sitting in New York County (each, a "New York Court") and has validly and irrevocably waived any objection to the laying of venue of any suit, action or proceeding brought in any such court; and the Company has the power to designate, appoint and empower, and pursuant to this Agreement and the other Transaction Documents, has legally, validly, effectively and irrevocably designated, appointed and empowered, an authorized agent for service of process in any action arising out of or relating to this Agreement or the other Transaction Documents, or the offering of the Securities in any New York Court, and service of process effected on such authorized agent will be effective to confer valid personal jurisdiction over the Company as provided in this Agreement and the other Transaction Documents.

(yy) Enforceability of Judgment. Any final judgment for a fixed or readily calculable sum of money rendered by a New York Court having jurisdiction under its own domestic laws in respect of any suit, action or proceeding against the Company based upon this Agreement or the other Transaction Documents and any instruments or agreements entered into for the consummation of the transactions contemplated herein and therein would be declared enforceable against the Company, without re-examination or review of the merits of the cause of action in respect of which the original judgment was given or re-litigation of the matters adjudicated upon, by the courts of the British Virgin Islands and the PRC, provided that with respect to courts of the PRC, (A) adequate service of process has been effected and the defendant has had a reasonable opportunity to be heard, (B) such judgments or the enforcement thereof are not contrary to the law, public policy, security or sovereignty of the PRC, (C) such judgments were not obtained by fraudulent means and do not conflict with any other valid judgment in the same matter between the same parties and (D) an action between the same parties in the same matter is not pending in any PRC court at the time the lawsuit is instituted in a foreign court. The Company is not aware of any reason why the enforcement in the British Virgin Islands or the PRC of such a New York Court judgment would be, as of the date hereof, contrary to public policy of the British Virgin Islands or the PRC.

(zz) Foreign Private Issuer. The Company is a "foreign private issuer" as defined in Rule 405 promulgated under the Securities Act.

4. COVENANTS.

(a) Best Efforts. Each party shall use its reasonable best efforts timely to satisfy each of the covenants and the conditions to be satisfied by it as provided in Sections 6 and 7 of this Agreement.

(b) Form D and Blue Sky. The Company agrees to file a Form D with respect to the Securities as required under Regulation D. The Company shall, on or before the Closing Date, take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for or to qualify the Securities for sale to the Buyers at the Closing pursuant to this Agreement under applicable securities or "Blue Sky" laws of the states of the United States (or to obtain an exemption from such qualification). The Company shall make all filings and reports relating to the offer and sale of the Securities required under applicable securities or "Blue Sky" laws of the states of the United States following the Closing Date.

(c) Reporting Status. Until the date on which the Investors (as defined in the Registration Rights Agreement) shall have sold all of the Purchased Shares and Warrant Shares and none of the Warrants are outstanding (the “**Reporting Period**”), the Company shall timely file all reports required to be filed with the SEC pursuant to the 1934 Act, and the Company shall not terminate its status as an issuer required to file reports under the 1934 Act even if the 1934 Act or the rules and regulations thereunder would no longer require or otherwise permit such termination, and the Company shall take all actions necessary to maintain its eligibility to register the resale of the Purchased Shares and Warrant Shares by the Investors on Form F-3 or such other applicable form.

(d) Use of Proceeds. The Company will use the proceeds from the sale of the Securities for general corporate purposes, but not, directly or indirectly, for (i) except as set forth on Schedule 4(d), the satisfaction of any indebtedness of the Company or any of its Subsidiaries, (ii) the redemption or repurchase of any securities of the Company or any of its Subsidiaries, or (iii) the settlement of any outstanding litigation.

(e) Financial Information. The Company agrees to send the following to each Investor (as defined in the Registration Rights Agreement) during the Reporting Period (i) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC, a copy of its Annual Reports on Form 20-F, periodic reports containing financial statements on Form 6-K, any Current Reports on Form 6-K (or any analogous reports under the 1934 Act) and any registration statements or amendments filed pursuant to the 1933 Act, (ii) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC or are available to the public on the Company’s website on the same day as the release thereof, e-mailed copies of all press releases issued by the Company or any of its Subsidiaries and (iii) unless the following are filed with the SEC through EDGAR and are available to the public through the EDGAR system, within one (1) Business Day after the filing thereof with the SEC or are available to the public on the Company’s website on the same day as the release thereof, copies of any notices and other information made available or given to the shareholders of the Company generally, contemporaneously with the making available or giving thereof to the shareholders. As used herein, “**Business Day**” means any day other than Saturday, Sunday or other day on which commercial banks in The City of New York are authorized or required by law to remain closed.

(f) Listing. The Company shall promptly secure the listing of all of the Registrable Securities (as defined in the Registration Rights Agreement) upon each national securities exchange and automated quotation system, if any, upon which the Common Shares are then listed (subject to official notice of issuance) and shall maintain such listing of all Registrable Securities from time to time issuable under the terms of the Transaction Documents. The Company shall maintain the authorization for quotation of the Common Shares on the Principal Market or any other Eligible Market (as defined in the Warrants). Neither the Company nor any of its Subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Shares on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 4(f).

(g) Fees. The Company shall be responsible for the payment of the Placement Agent’s fees, financial advisory fees, transfer agent fees, DTC (as defined below) fees, or broker’s commissions (other than for Persons engaged by any Buyer) relating to or arising out of the transactions contemplated hereby, including, without limitation, any fees or commissions payable to the Placement Agent, including any legal fees and expenses of the Placement Agent as set forth in the Transaction Documents. The Company shall pay, and hold each Buyer harmless against, any liability, loss or expense (including, without limitation, reasonable attorney’s fees and out-of-pocket expenses) arising in connection with any claim relating to any such payment. Except as otherwise set forth in the Transaction Documents, each party to this Agreement shall bear its own expenses in connection with the sale of the Securities to the Buyers.

(h) Pledge of Securities. The Company acknowledges and agrees that the Securities may be pledged by an Investor in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Securities. The pledge of Securities shall not be deemed to be a transfer, sale or assignment of the Securities hereunder, and no Investor effecting a pledge of Securities shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Document, including, without limitation, Section 2(f) hereof; provided that an Investor and its pledgee shall be required to comply with the provisions of Section 2(f) hereof in order to effect a sale, transfer or assignment of Securities to such pledgee. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Securities may reasonably request in connection with a pledge of the Securities to such pledgee by an Investor.

(i) Disclosure of Transactions and Other Material Information. On or before the Disclosure Time (as defined below), the Company shall (A) issue a press release disclosing all material terms of the transactions contemplated hereby and (B) simultaneously file a Current Report on Form 6-K describing the terms of the transactions contemplated by the Transaction Documents in the form required by the 1934 Act and attaching the material Transaction Documents (including, without limitation, this Agreement (and all schedules and exhibits to this Agreement required to be filed under the rules and regulations of the 1934 Act), the form of the Warrants, the form of Lock-Up Agreement and the form of the Registration Rights Agreement as exhibits to such filing (including all attachments), the “**6-K Filing**”). From and after the earlier of the filing of the 6-K Filing or the issuance of the press release, no Buyer shall be in possession of any material, non-public information received from the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents, that is not disclosed in the 6-K Filing. In addition, effective upon the filing of the 6-K Filing, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement, whether written or oral, between the Company, any of its Subsidiaries or any of their respective officers, directors, affiliates, employees or agents, on the one hand, and any of the Buyers or any of their affiliates, on the other hand, shall terminate. The Company shall not, and shall cause each of its Subsidiaries and its and each of their respective officers, directors, employees, affiliates and agents, not to, provide any Buyer with any material, non-public information regarding the Company or any of its Subsidiaries from and after the date hereof without the express prior written consent of such Buyer. In the event of a breach of any of the foregoing covenants by the Company, any of its Subsidiaries, or any of its or their respective officers, directors, employees, affiliates and agents, in addition to any other remedy provided herein or in the Transaction Documents, a Buyer shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such material, non-public information without the prior approval by the Company, its Subsidiaries, or any of its or their respective officers, directors, employees, affiliates or agents. No Buyer shall have any liability to the Company, its Subsidiaries, or any of its or their respective officers, directors, employees, affiliates or agents for any such disclosure. To the extent that the Company delivers any material, non-public information to a Buyer without such Buyer’s consent, the Company hereby covenants and agrees that such Buyer shall not have any duty of confidentiality to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents with respect to, or a duty to the Company, any of its Subsidiaries or any of their respective officers, directors, employees, affiliates or agents not to trade on the basis of, such material, non-public information. Subject to the foregoing, neither the Company, its Subsidiaries nor any Buyer shall issue any press releases or any other public statements with respect to the transactions contemplated hereby; provided, however, that the Company shall be entitled, without the prior approval of any Buyer, to make any press release or other public disclosure with respect to such transactions (i) in substantial conformity with the 6-K Filing and contemporaneously therewith and (ii) as is required by applicable law and regulations (provided that in the case of clause (i) each Buyer shall be consulted by the Company in connection with any such press release or other public disclosure prior to its release). Except for the Registration Statement required to be filed pursuant to the Registration Rights Agreement, without the prior written consent of any applicable Buyer, neither the Company nor any of its Subsidiaries or affiliates shall disclose the name of such Buyer in any filing, announcement, release or otherwise. As used herein, “**Disclosure Time**” means, (i) if this Agreement is signed after 9:00 a.m. (New York City time) and before midnight (New York City time) on any Trading Day, 9:01 a.m. (New York City time) on the Trading Day immediately following the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent, or (ii) if this Agreement is signed between midnight (New York City time) and 9:00 a.m. (New York City time) on any Trading Day, no later than 9:01 a.m. (New York City time) on the date hereof, unless otherwise instructed as to an earlier time by the Placement Agent.

(j) Corporate Existence. So long as any Buyer beneficially owns any Warrants, the Company shall maintain its corporate existence and shall not be party to any Fundamental Transaction (as defined in the Warrants) unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Warrants.

(k) Reservation of Shares. So long as any Buyer owns any Warrants, the Company shall take all action necessary to at all times after the date hereof have authorized, and reserved for the purpose of issuance, no less than the number of Common Shares issuable upon exercise of the Warrants then outstanding (without taking into account any limitations on the exercise of the Warrants set forth in the Warrants). If at any time the number of Common Shares authorized and reserved for issuance is not sufficient to meet the Required Reserved Amount, the Company will promptly take all corporate action necessary to authorize and reserve a sufficient number of shares, including, without limitation, if required, calling a special meeting of shareholders to authorize additional shares to meet the Company's obligations under Section 3(c), in the case of an insufficient number of authorized shares, obtain shareholder approval of an increase in such authorized number of shares, and voting the management shares of the Company in favor of an increase in the authorized shares of the Company to ensure that the number of authorized shares is sufficient to meet the Required Reserved Amount.

(l) Conduct of Business. The business of the Company and its Subsidiaries shall not be conducted in violation of any law, ordinance or regulation of any governmental entity, including, without limitation, FCPA and other applicable Anti-Bribery Laws, OFAC regulations and other applicable Sanctions Laws, and Anti-Money Laundering Laws.

(i) Neither the Company, nor any of its Subsidiaries or affiliates, directors, officers, employees, representatives or agents shall:

(a) conduct any business or engage in any transaction or dealing with or for the benefit of any Blocked Person, including the making or receiving of any contribution of funds, goods or services to, from or for the benefit of any Blocked Person;

(b) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked or subject to blocking pursuant to the applicable Sanctions Laws;

(c) use any of the proceeds of the transactions contemplated by this Agreement to finance, promote or otherwise support in any manner any illegal activity, including, without limitation, any Anti-Money Laundering Laws, Sanctions Laws, or Anti-Bribery Laws; or

(d) violate, attempt to violate, or engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, any of the Anti-Money Laundering Laws, Sanctions Laws, or Anti-Bribery Laws.

(ii) The Company shall maintain in effect and enforce policies and procedures designed to ensure compliance by the Company and its Subsidiaries and their directors, officers, employees, agents representatives and affiliates with the Sanctions Laws and Anti-Bribery Laws.

(iii) The Company will promptly notify the Buyers in writing if any of the Company, or any of its Subsidiaries or affiliates, directors, officers, employees, representatives or agents, shall become a Blocked Person, or become directly or indirectly owned or controlled by a Blocked Person.

(iv) The Company shall provide such information and documentation as the Buyers or any of their affiliates may require to satisfy compliance with the Anti-Money Laundering Laws, Sanctions Laws, or Anti-Bribery Laws.

(v) The covenants set forth above shall be ongoing. The Company shall promptly notify the Buyers in writing should it become aware (a) of any changes to these covenants, or (b) if it cannot comply with

the covenants set forth herein. The Company shall also promptly notify the Buyers in writing should they become aware of an investigation, litigation or regulatory action relating to an alleged or potential violation of the Anti-Money Laundering Laws, Sanctions Laws, and Anti-Bribery Laws.

(m) Additional Issuances of Securities.

(i) For purposes of this Agreement, the following definitions shall apply.

(1) “**Convertible Securities**” means any stock or securities (other than Options) convertible into or exercisable or exchangeable for Common Shares.

(2) “**Options**” means any rights, warrants or options to subscribe for or purchase Common Shares or Convertible Securities.

(3) “**Common Shares Equivalents**” means, collectively, Options and Convertible Securities, and any other securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Shares, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Shares.

(4) “**Trigger Date**” means the earlier of (x) such time as one or more Registration Statement(s) covering the resale of all Registrable Securities has been effective and available for the re-sale of all such Registrable Securities and (y) such time as all of the Registrable Securities may be sold without restriction or limitation pursuant to Rule 144.

(5) “**Variable Rate Transaction**” means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional Common Shares either (A) at a conversion price, exercise price or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the Common Shares at any time after the initial issuance of such debt or equity securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Shares or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit or an “at-the-market offering”, whereby the Company may issue securities at a future determined price regardless of whether shares pursuant to such agreement have actually been issued and regardless of whether such agreement is subsequently canceled.

(ii) From the date hereof until the date that is sixty (60) calendar days after the Trigger Date, the Company shall not, directly or indirectly, file any registration statement with the SEC, or file any amendment or supplement thereto or cause any registration statement or amendment thereto to be declared effective by the SEC, other than amendments or supplements to registration statements (but not amendments or supplements to shelf registration statements) that are filed and declared effective with the SEC prior to the date hereof or grant any registration rights to any Person that can be exercised prior to such time as set forth above, other than pursuant to the Registration Rights Agreement. From the date hereof until the date that is sixty (60) calendar days after the Trigger Date, the Company shall not, (1) directly or indirectly, offer, sell, grant any option to purchase, or otherwise dispose of (or announce any offer, sale, grant or any option to purchase or other disposition of) any of its or its Subsidiaries’ Common Shares or Common Share Equivalents or (2) be party to any solicitations, negotiations or discussions with regard to the foregoing. From the date hereof until the later of (i) the date that is sixty (60) calendar days after the Trigger Date and (ii) the one (1) year anniversary of the Closing Date, the Company and each Subsidiary shall be prohibited from entering into an agreement to effect any Subsequent Placement involving a Variable Rate Transaction. Any Purchaser shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(iii) The restrictions contained in subsection (ii) of this Section 4(m) shall not apply in connection with the issuance of any Excluded Securities (as defined in the Series A Warrants); provided however that within sixty (60) calendar days after the Initial Effective Date (as defined in the Registration Rights Agreement), the Company shall not issue or announce any issuance of any of its Common Shares or Common Share Equivalents in connection with the convertible promissory note and the securities purchase agreement dated June 29, 2023 the Company entered into with Streeterville Capital, LLC.

(n) Intentionally omitted.

(o) Lock-Up. The Company shall not amend, modify, waive or terminate any provision of any of the Lock-Up Agreements (or any substantially similar lock-up agreements signed by transferees of the initial parties to the Lock-Up Agreements) except to extend the term of the lock-up period and shall enforce the provisions of each Lock-Up Agreement (or any substantially similar lock-up agreements signed by transferees of the initial parties to the Lock-Up Agreements) in accordance with its terms. If any officer or director that is a party to a Lock-Up Agreement (or any substantially similar lock-up agreements signed by transferees of the initial parties to the Lock-Up Agreements) breaches any provision of a Lock-Up Agreement, the Company shall promptly use its best efforts to seek specific performance of the terms of such Lock-Up Agreement (or any substantially similar lock-up agreements signed by transferees of the initial parties to the Lock-Up Agreements).

(p) Notice of Disqualification Events. The Company will notify the Buyers in writing, prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, become a Disqualification Event relating to any Issuer Covered Person.

(q) FAST Compliance. While any Warrants are outstanding, the Company shall maintain a transfer agent that participates in the DTC Fast Automated Securities Transfer Program.

(r) Passive Foreign Investment Company. The Company shall conduct its business, and shall cause its Subsidiaries to conduct their respective businesses, in such a manner as will ensure that the Company will not be deemed to constitute a passive foreign investment company within the meaning of Section 1297 of the Code.

(s) Exercise Procedures. The form of Exercise Notice (as defined in the Warrants) included in the Warrants sets forth the totality of the procedures required of the Buyers in order to exercise the Warrants. No legal opinion or other information or instructions shall be required of the Buyers to exercise their Warrants. The Company shall honor exercises of the Warrants and shall deliver the Warrant Shares in accordance with the terms, conditions and time periods set forth in the Warrants. Without limiting the preceding sentences, no ink-original Exercise Notice shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Exercise Notice form be required in order to exercise the Warrants.

(t) General Solicitation. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act) or any person acting on behalf of the Company or such affiliate will solicit any offer to buy or offer or sell the Securities by means of any form of general solicitation or general advertising within the meaning of Regulation D, including: (i) any advertisement, article, notice or other communication published in any newspaper, magazine or similar medium or broadcast over television or radio; and (ii) any seminar or meeting whose attendees have been invited by any general solicitation or general advertising.

(u) Integration. None of the Company, any of its affiliates (as defined in Rule 501(b) under the 1933 Act), or any person acting on behalf of the Company or such affiliate will sell, offer for sale, or solicit offers to buy or otherwise negotiate in respect of any security (as defined in the 1933 Act) which will be integrated with the sale of the Securities in a manner which would require the registration of the Securities under the 1933 Act or require stockholder approval under the rules and regulations of the Principal Market and the Company will take all action that is appropriate or necessary to assure that its offerings of other securities will not be integrated for purposes of the 1933 Act or the rules and regulations of the Principal Market, with the issuance of Securities contemplated hereby.

(v) Notice of Disqualification Events. The Company will notify the Buyers in writing, prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, become a Disqualification Event relating to any Issuer Covered Person.

(w) PRC Compliance. The Company shall comply with the PRC Overseas Investment and Listing Regulations, and use its reasonable efforts to cause holders of its Common Shares that are, or that are directly or indirectly owned or controlled by, Chinese residents or Chinese citizens, to comply with the PRC Overseas Investment and Listing Regulations applicable to them, including requesting each such shareholder to complete any registration and other procedures required under applicable PRC Overseas Investment and Listing Regulations (including any applicable rules and regulations of the SAFE).

5. REGISTER; TRANSFER AGENT INSTRUCTIONS.

(a) Register. The Company shall maintain at its principal executive offices (or such other office or agency of the Company as it may designate by notice to each holder of Securities), a register for the Warrants in which the Company shall record the name and address of the Person in whose name the Warrants have been issued (including the name and address of each transferee) and the number of Warrant Shares issuable upon exercise of the Warrants held by such Person. The Company shall keep the register open and available at all times during business hours for inspection of any Buyer or its legal representatives.

(b) Transfer Agent Instructions. The Company shall issue irrevocable instructions to its transfer agent, and any subsequent transfer agent, in form and substance reasonably acceptable to the Placement Agent (the “**Irrevocable Transfer Agent Instructions**”) to issue certificates or credit shares to the applicable balance accounts at DTC, registered in the name of each Buyer or its respective nominee(s), for the Purchased Shares and the Warrant Shares issued at the Closing or upon exercise of the Warrants in such amounts as specified from time to time by each Buyer to the Company upon exercise of the Warrants. The Company warrants that no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5(b), and stop transfer instructions to give effect to Section 2(f) hereof, will be given by the Company to its transfer agent, and that the Securities shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement and the other Transaction Documents. If a Buyer effects a sale, assignment or transfer of the Securities in accordance with Section 2(f), the Company shall permit the transfer and shall promptly instruct its transfer agent to issue one or more certificates or credit shares to the applicable balance accounts at DTC in such name and in such denominations as specified by such Buyer to effect such sale, transfer or assignment. In the event that such sale, assignment or transfer involves the Purchased Shares or the Warrant Shares sold, assigned or transferred pursuant to an effective registration statement or pursuant to Rule 144, the transfer agent shall issue such Securities to the Buyer, assignee or transferee, as the case may be, without any restrictive legend. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to a Buyer. Accordingly, the Company acknowledges that the remedy at law for a breach of its obligations under this Section 5(b) will be inadequate and agrees, in the event of a breach or threatened breach by the Company of the provisions of this Section 5(b), that a Buyer shall be entitled, in addition to all other available remedies, to an order and/or injunction restraining any breach and requiring immediate issuance and transfer, without the necessity of showing economic loss and without any bond or other security being required. The Company shall cause its counsel to issue the legal opinion referred to in the Irrevocable Transfer Agent Instructions to the Company’s transfer agent on each Effective Date (as defined in the Registration Rights Agreement). Any fees (with respect to the transfer agent, counsel to the Company or otherwise) associated with the issuance of such opinion or the removal of any legends on any of the Securities shall be borne by the Company.

6. CONDITIONS TO THE COMPANY’S OBLIGATION TO SELL.

The obligation of the Company hereunder to issue and sell the Purchased Shares and the related Warrants to each Buyer at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for the Company's sole benefit and may be waived by the Company at any time in its sole discretion by providing each Buyer with prior written notice thereof:

(i) Such Buyer shall have executed each of the Transaction Documents to which it is a party and delivered the same to the Company.

(ii) Such Buyer shall have delivered to the Company the Purchase Price, for the Purchased Shares and the related Warrants being purchased by such Buyer at the Closing by wire transfer of immediately available funds pursuant to the wire instructions provided by the Company.

(iii) The representations and warranties of such Buyer shall be true and correct as of the date when made and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date), and such Buyer shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by such Buyer at or prior to the Closing Date.

7. CONDITIONS TO EACH BUYER'S OBLIGATION TO PURCHASE.

The obligation of each Buyer hereunder to purchase the Purchased Shares and the related Warrants at the Closing is subject to the satisfaction, at or before the Closing Date, of each of the following conditions, provided that these conditions are for each Buyer's sole benefit and may be waived by such Buyer at any time in its sole discretion by providing the Company with prior written notice thereof:

(i) The Company shall have duly executed and delivered to such Buyer (A) each of the Transaction Documents, (B) the Purchased Shares (allocated in such amounts as such Buyer shall request), being purchased by such Buyer at the Closing pursuant to this Agreement and (C) the related Warrants (allocated in such amounts as such Buyer shall request) being purchased by such Buyer at the Closing pursuant to this Agreement.

(ii) Reserved.

(iii) The Company shall have delivered to such Buyer a copy of the Irrevocable Transfer Agent Instructions, which instructions shall have been delivered to and acknowledged in writing by the Company's transfer agent.

(iv) The Company shall have delivered to such Buyer a certificate evidencing the formation and good standing of the Company and each of its Subsidiaries in such entity's jurisdiction of formation issued by the Secretary of State (or comparable office) of such jurisdiction, as of a date within ten (10) calendar days prior to the Closing Date.

(v) Reserved.

(vi) The Company shall have delivered to such Buyer a certified copy of the Certificate of Incorporation as certified by the Chief Executive Officer.

(vii) The Company shall have delivered to such Buyer a certificate, executed by the Secretary of the Company and dated as of the Closing Date, as to (i) the resolutions consistent with Section 3(b) as adopted by the Company's Board of Directors in a form reasonably acceptable to the Placement Agent and (ii) the , each as in effect at the Closing, in form and substance reasonably acceptable to the Placement Agent.

(viii) The representations and warranties of the Company shall be true and correct as of the date hereof and as of the Closing Date as though made at that time (except for representations and warranties that speak as of a specific date which shall be true and correct as of such specified date) and the Company shall have

performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Closing Date. Such Buyer shall have received a certificate, executed by the Chief Executive Officer of the Company, dated as of the Closing Date, to the foregoing effect and in form and substance reasonably acceptable to the Placement Agent.

(ix) The Company shall have delivered to such Buyer a letter from the Company's transfer agent certifying the number of Common Shares outstanding as of a date within five (5) calendar days prior to the Closing Date.

(x) The Company shall have delivered to each Buyer a lock-up agreement in form and substance reasonably acceptable to the Placement Agent in favor of the Company executed and delivered by each executive officer and each director of the Company (collectively, the "Lock-Up Agreements").

(xi) The Common Shares (I) shall be designated for quotation or listed on the Principal Market and (II) shall not have been suspended, as of the Closing Date, by the SEC or the Principal Market from trading on the Principal Market nor shall suspension by the SEC or the Principal Market have been threatened, as of the Closing Date, either (A) in writing by the SEC or the Principal Market or (B) by falling below the minimum listing maintenance requirements of the Principal Market.

(xii) The Company shall have obtained all governmental, regulatory or third party consents and approvals, if any, necessary for the sale of the Securities.

(xiii) No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or Governmental Entity of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents and since the date of execution of this Agreement, no event or series of events shall have occurred that reasonably would have or result in a Material Adverse Effect.

(xiv) The Company shall have delivered to such Buyer such other documents relating to the transactions contemplated by this Agreement as such Buyer or its counsel may reasonably request.

8. TERMINATION. In the event that the Closing shall not have occurred with respect to a Buyer on or before five (5) Business Days from the date hereof due to the Company's or such Buyer's failure to satisfy the conditions set forth in Sections 6 and 7 above (and the nonbreaching party's failure to waive such unsatisfied condition(s)), the nonbreaching party shall have the option to terminate this Agreement with respect to such breaching party at the close of business on such date by delivering a written notice to that effect to each other party to this Agreement and without liability of any party to any other party.

9. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or under any of the other Transaction Documents or with any transaction contemplated hereby or thereby, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT**

MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR UNDER ANY OTHER TRANSACTION DOCUMENT OR IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, ANY OTHER TRANSACTION DOCUMENT OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY.

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party. In the event that any signature is delivered by facsimile transmission or by an e-mail which contains a portable document format (.pdf) file of an executed signature page, such signature page shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such signature page were an original thereof.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(e) Entire Agreement; Amendments. This Agreement and the other Transaction Documents supersede all other prior oral or written agreements between the Buyers, the Company, their affiliates and Persons acting on their behalf with respect to the matters discussed herein, and this Agreement, the other Transaction Documents and the instruments referenced herein and therein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor any Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be amended other than by an instrument in writing signed by the Company and the holders of at least a majority of the aggregate amount of Securities issued and issuable hereunder and under the Warrants (without regard to any restriction or limitation on the exercise of the Warrants contained therein) (the “**Required Holders**”), and any amendment to this Agreement made in conformity with the provisions of this Section 9(e) shall be binding on all Buyers and holders of Securities and the Company; provided that any proposed amendment or waiver that disproportionately, materially and adversely affects the rights and obligations of any Buyer relative to the comparable rights and obligations of the other Buyers shall require the prior written consent of such adversely affected Buyer. No provisions hereto may be waived other than by an instrument in writing signed by the party against whom enforcement is sought. No such amendment shall be effective to the extent that it applies to less than all of the Buyers or holders of the applicable Securities then outstanding. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration (other than the reimbursement of legal fees) also is offered to all of the parties to the Transaction Documents, holders of Purchased Shares or holders of the Warrants, as the case may be. The Company has not, directly or indirectly, made any agreements with any Buyers relating to the terms or conditions of the transactions contemplated by the Transaction Documents except as set forth in the Transaction Documents. Without limiting the foregoing, the Company confirms that, except as set forth in this Agreement, no Buyer has made any commitment or promise or has any other obligation to provide any financing to the Company or otherwise.

(f) Notices. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement or any of the other Transaction Documents must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon delivery when sent by facsimile on or prior to 5:00 pm (New York time) on such date (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iii) one (1) Business Day after they are sent by facsimile after 5:00 pm (New York time) on a day (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iv) upon delivery when sent by electronic mail on or prior to 5:00 pm (New York time) on such date (provided that the sending party does not receive an automated rejection notice); (v) one (1) Business Day after they are sent by electronic mail after 5:00 pm (New York time) on such date (provided that the sending party does not receive an automated rejection notice); or (vi) one (1) Business Day after deposit with an overnight courier service, in each case properly addressed to the party to receive the same. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Tantech Holdings Ltd
No. 10 Cen Shan Road, Shuige Industrial Zone
Lishui City, Zhejiang Province 323000
People's Republic of China
Attention: Wangfeng Yan
Email: tantech@tantech.cn

With a copy (for informational purposes only) to:

Kaufman & Canoles, P.C.
1021 E. Cary Street, Suite 1400
Two James Center
Richmond, VA 23219
Attention: Anthony W. Basch, Esq.
Yan (Natalie) Wang, Esq.
Email: awbasch@kaufcan.com
ywang@kaufcan.com

If to a Buyer, to its address, facsimile number and e-mail address set forth on the Schedule of Buyers, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other address, facsimile number and/or e-mail address and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party five (5) calendar days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or e-mail containing the time, date, recipient facsimile number and an image of the first page of such transmission or (C) provided by an overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from an overnight courier service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns, including any purchasers of the Purchased Shares or the Warrants. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Required Holders, including by way of a Fundamental Transaction (unless the Company is in compliance with the applicable provisions governing Fundamental Transactions set forth in the Warrants). A Buyer may assign some or all of its rights hereunder without the consent of the Company, in which event such assignee shall be deemed to be a Buyer hereunder with respect to such assigned rights.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except that (i) the Placement Agent shall be a third party beneficiary to this Agreement to such extent required by the Placement Agent Agreement by and between the Company and the Placement Agent dated as of or around the date hereof and (ii) each Indemnitee shall have the right to enforce the obligations of the Company with respect to Section 9(k).

(i) Survival. Unless this Agreement is terminated under Section 8, the representations and warranties of the Company and the Buyers contained in Sections 2 and 3, and the agreements and covenants set forth in Sections 4, 5 and 9 shall survive the Closing. Each Buyer shall be responsible only for its own representations, warranties, agreements and covenants hereunder.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

39

(k) Indemnification.

(i) In consideration of each Buyer's execution and delivery of the Transaction Documents and acquiring the Securities thereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless each Buyer, such Buyer's direct or indirect affiliates and investment advisors and managers (the "**Buyer Related Parties**"), and all of such Buyer Related Parties' respective direct or indirect officers, directors, employees, principals, partners, members, affiliates, advisors and agents (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, and together with the Buyer Related Parties, the "**Indemnitees**"), as incurred and with such Indemnified Liabilities (as defined below) to be paid by the Company to the Indemnitees as soon as practicable but in any event no later than twenty-five (25) calendar days after written demand by Indemnitees therefor to the Company, from and against any and all actions, causes of action, suits, claims (including causes of action, suits or claims asserted directly by or between an Indemnitee and the Company), losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "**Indemnified Liabilities**"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, or (c) any action, cause of action, suit, claim, proceeding, investigation, subpoena or similar event brought or made against or involving, or served upon, such Indemnitee by a third party (including for these purposes a derivative action brought on behalf of the Company) and arising out of or resulting from or related to (i) the investment in the Securities, the transactions contemplated by the Transaction Documents or the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (ii) any transaction financed or to be financed in whole or in part, directly or indirectly, with the proceeds of the issuance of the Securities, (iii) the public announcement by the Company of the Transaction Documents and/or the issuance of the Securities, including any accompanying release of the Company's financial results, or (iv) the status of such Indemnitee or holder of the Securities as an investor in the Company pursuant to the transactions contemplated by the Transaction Documents, except in the event that such cause of action, suit or claim is determined by a court of competent jurisdiction in a full and final resolution to be the sole result of the gross negligence, willful misconduct or fraud by any Buyer. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities that is permissible under applicable law.

40

(ii) A claim for indemnification for any matter not involving a Third Party Claim (as defined below) may be asserted by written notice to the party from whom indemnification is sought; provided, however, that failure to so notify the indemnitor hereunder (the “**Indemnifying Party**”) shall not preclude the Indemnitee from any indemnification that it may claim in accordance with this Section 9(k).

(iii) Promptly after the receipt by an Indemnitee of notice of any action, cause of action, suit, proceeding, claim, investigation, subpoena or similar event by a third party that an Indemnitee believes in good faith is an indemnifiable claim hereunder (each, a “**Third Party Claim**”), such Indemnitee shall deliver to the Indemnifying Party a written notice of such Third Party Claim (which notice shall include reasonable detail, to the extent then known, of the basis for the liability and the particular section of the Agreement breached and a copy of all papers served with respect to such Third Party Claim and any other reasonably necessary documents), and the Indemnifying Party shall have the right to request to participate in and, with the consent of the Indemnitee (such consent not to be unreasonably withheld, delayed, or conditioned), to assume control of the defense thereof with counsel selected by Indemnifying Party and reasonably satisfactory to the Indemnitee; provided, however, that an Indemnitee shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for all such Indemnitees to be paid by the Indemnifying Party, if, in the reasonable opinion of counsel retained by the Indemnitee, the representation by such counsel of the Indemnitee and the Indemnifying Party would be inappropriate due to (i) actual conflicts of interests between such Indemnitee and the Indemnifying Party or (ii) the nature of such Third Party Claim. The Indemnitee shall reasonably cooperate with the Indemnifying Party in connection with any negotiation or defense of any such Third Party Claim by the Indemnifying Party and shall furnish to the Indemnifying Party all information reasonably requested by the Indemnifying Party which relates to such Third Party Claim. The Indemnifying Party shall keep the Indemnitee reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No Indemnifying Party shall be liable for any settlement of any action, claim or proceeding arising out of any Third Party Claim effected without its prior written consent, provided, however, that the Indemnifying Party shall not unreasonably withhold, delay or condition its consent. No Indemnifying Party shall, without the prior written consent of the Indemnitee, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnitee of a release from all liability in respect to such Third Party Claim and such settlement shall not include any admission as to fault on the part of the Indemnitee. Following indemnification as provided for hereunder, the Indemnifying Party shall be subrogated to all rights of the Indemnitee with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the Indemnifying Party within a reasonable time shall not relieve such Indemnifying Party of any liability to the Indemnitee under this Section 9(k). For the avoidance of doubt, the obligations of the Indemnitee contained in this Section 9(k)(iii) shall apply to Third Party Claims only, and shall not apply to direct claims by or between an Indemnitee and the Company.

(iv) Notwithstanding any other provision of this Agreement, except in the case of fraud, no party shall be liable for any indirect (including lost profit), exemplary or punitive damages or any other damages to the extent not reasonably foreseeable arising out of or in connection with this Agreement or the transactions contemplated hereby (in each case, unless any such damages are awarded pursuant to a Third Party Claim).

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Remedies. Each Buyer and each holder of the Securities shall have all rights and remedies set forth in the Transaction Documents and all rights and remedies which such holders have been granted at any time under any other agreement or contract and all of the rights which such holders have under any law. Any Person having any rights under any provision of this Agreement shall be entitled to enforce such rights specifically (without posting a bond or other security), to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law. Furthermore, the Company recognizes that in the event that it fails to perform, observe, or discharge any or all of its obligations under the Transaction Documents, any remedy at law may prove to

be inadequate relief to the Buyers. The Company therefore agrees that the Buyers shall be entitled to seek temporary and permanent injunctive relief in any such case without the necessity of proving actual damages and without posting a bond or other security.

(n) Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) the Transaction Documents, whenever any Buyer exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Buyer may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

42

(o) Payment Set Aside. To the extent that the Company makes a payment or payments to the Buyers hereunder or pursuant to any of the other Transaction Documents or the Buyers enforce or exercise their rights hereunder or thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other Person under any law (including, without limitation, any bankruptcy law, foreign, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

(p) Independent Nature of Buyers' Obligations and Rights. The obligations of each Buyer under any Transaction Document are several and not joint with the obligations of any other Buyer, and no Buyer shall be responsible in any way for the performance of the obligations of any other Buyer under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Buyer pursuant hereto or thereto, shall be deemed to constitute the Buyers as, and the Company acknowledges that the Buyers do not so constitute, a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Buyers are in any way acting in concert or as a group, and the Company shall not assert any such claim with respect to such obligations or the transactions contemplated by the Transaction Documents and the Company acknowledges that the Buyers are not acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. The Company acknowledges and each Buyer confirms that it has independently participated in the negotiation of the transaction contemplated hereby with the advice of its own counsel and advisors. Each Buyer shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of any other Transaction Documents, and it shall not be necessary for any other Buyer to be joined as an additional party in any proceeding for such purpose.

[Signature Page Follows]

43

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

COMPANY:

TANTECH HOLDINGS LTD.

By: _____
Name:
Title:

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Securities Purchase Agreement to be duly executed as of the date first written above.

BUYER:

By: _____
Name:
Title:

SCHEDULE OF BUYERS

(1) Buyer	(2) Address, Facsimile Number and E-mail	(3) Number of Purchased Shares	(4) Number of Series A Warrant Shares	(5) Number of Pre-Funded Warrants	(6) Purchase Price	(7) Legal Representative's Address, Facsimile Number and E-mail
		[]	[]		\$ []	
		[]	[]		\$ []	
		[]	[]		\$ []	
TOTAL		[•]	[•]		\$ [•]	

EXHIBITS

- Exhibit A Form of Pre-Funded Warrants
- Exhibit B Form of Series A Warrants
- Exhibit C Form of Series B Warrants
- Exhibit D Form of Registration Rights Agreement

REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (this “**Agreement**”), dated as of April 22, 2024, by and among Tantech Holdings Ltd, a company incorporated under the laws of the British Virgin Islands (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries or affiliates of Tantech Holdings Ltd, the “**Company**”), and the investors listed on the Schedule of Buyers attached hereto (each, a “**Buyer**” and collectively, the “**Buyers**”).

WHEREAS:

A. In connection with the Securities Purchase Agreement by and among the parties hereto dated as of April 22, 2024 (the “**Securities Purchase Agreement**”), the Company has agreed, upon the terms and subject to the conditions of the Securities Purchase Agreement, to issue and sell to each Buyer, units consisting of (i) shares (the “**Purchased Shares**”) of the Company’s Common Shares, par value \$0.24 per share (the “**Common Shares**”), and/or pre-funded warrants (the “**Pre-Funded Warrants**”) to purchase Common Shares (such underlying Common Shares, the “**Pre-Funded Warrant Shares**”) in accordance with the terms of the Pre-Funded Warrants and (ii) two (2) series of warrants (the “**Series A and Series B Warrants**” and together with the Pre-Funded Warrants, the “**Warrants**”) to purchase Common Shares (such underlying Common Shares, collectively, the “**Series A and Series B Warrant Shares**” and together with the Pre-Funded Warrant Shares, the “**Warrant Shares**”) in accordance with the terms of the Series A and Series B Warrants.

B. In accordance with the terms of the Securities Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the “**1933 Act**”), and applicable state securities laws.

NOW, THEREFORE, in consideration of the premises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each of the Buyers hereby agree as follows:

1. Definitions.

Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Securities Purchase Agreement. As used in this Agreement, the following terms shall have the following meanings:

(a) “**Additional Effective Date**” means the date the Additional Registration Statement is declared effective by the SEC.

(b) “**Additional Effectiveness Deadline**” means the date which is the earlier of (i) in the event that the Additional Registration Statement (x) is not subject to a full review by the SEC, the date which is thirty (30) calendar days after the earlier of the Additional Filing Date and the Additional Filing Deadline or (y) is subject to a full review by the SEC, the date which is sixty (60) calendar days after the earlier of the Additional Filing Date and the Additional Filing Deadline and (ii) the fifth (5th) Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Additional Registration Statement will not be reviewed or will not be subject to further review; provided, however, that if the Additional Effectiveness Deadline falls on a Saturday, Sunday or other day that the SEC is closed for business, the Additional Effectiveness Deadline shall be extended to the next Business Day on which the SEC is open for business.

(c) “**Additional Filing Date**” means the date on which the Additional Registration Statement is filed with the SEC.

(d) “**Additional Filing Deadline**” means if Cutback Shares are required to be included in any Additional Registration Statement, the later of (i) the date sixty (60) days after the date substantially all of the Registrable Securities registered under the immediately preceding Registration Statement are sold and (ii) the date six (6) months from the Initial Effective Date or the most recent Additional Effective Date, as applicable.

(e) “**Additional Registrable Securities**” means, (i) any Cutback Shares not previously included on a Registration Statement, and (ii) any capital stock of the Company issued or issuable with respect to the Purchased Shares, the Warrants, the Warrant Shares or the Cutback Shares, as applicable, as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, without regard to any limitations on exercise of the Warrants.

(f) “**Additional Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering the resale any Additional Registrable Securities.

(g) “**Additional Required Registration Amount**” means any Cutback Shares not previously included on a Registration Statement, all subject to adjustment as provided in Section 2(f), without regard to any limitations on the exercise of the Warrants.

(h) “**Business Day**” means any day other than Saturday, Sunday or any other day on which commercial banks in the City of New York are authorized or required by law to remain closed.

(i) “**Closing Date**” shall have the meaning set forth in the Securities Purchase Agreement.

(j) “**Cutback Shares**” means any of the Initial Required Registration Amount or the Additional Required Registration Amount of Registrable Securities not included in all Registration Statements previously declared effective hereunder as a result of a limitation on the maximum number of Common Shares of the Company permitted to be registered by the staff of the SEC pursuant to Rule 415. For the purpose of determining the Cutback Shares, in order to determine any applicable Required Registration Amount, unless an Investor gives written notice to the Company to the contrary with respect to the allocation of its Cutback Shares, first the Warrant Shares shall be excluded on a pro rata basis among the Investors until all of the Warrant Shares have been excluded and second the Purchased Shares shall be excluded on a pro rata basis among the Investors until all of the Purchased Shares have been excluded.

(k) Intentionally omitted.

(l) “**effective**” and “**effectiveness**” refer to a Registration Statement that has been declared effective by the SEC and is available for the resale of the Registrable Securities required to be covered thereby.

(m) “**Effective Date**” means the Initial Effective Date and the Additional Effective Date, as applicable.

(n) “**Effectiveness Deadline**” means the Initial Effectiveness Deadline and the Additional Effectiveness Deadline, as applicable.

(o) “**Eligible Market**” means the Principal Market, The New York Stock Exchange, Inc., the NYSE American, The NASDAQ Global Select Market, The Nasdaq Global Market, OTC QB or OTC QX.

(p) “**Filing Deadline**” means the Initial Filing Deadline and the Additional Filing Deadline, as applicable.

(q) “**Initial Effective Date**” means the date that the Initial Registration Statement has been declared effective by the SEC.

(r) “**Initial Effectiveness Deadline**” means the date which is the earlier of (x) (i) in the event that the Initial Registration Statement is not subject to a full review by the SEC, thirty (30) calendar days after the Initial Filing Deadline or (ii) in the event that the Initial Registration Statement is subject to a full review by the SEC or in the event that the Company is notified by the SEC to refile the Initial Registration Statement on Form F-1 or F-3, sixty (60) calendar days after the Initial Filing Deadline and (y) the fifth (5th) Business Day after the date the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Initial Registration Statement will not be reviewed or will not be subject to further review; provided, however, that if the Initial Effectiveness Deadline falls on a Saturday, Sunday or other day that the SEC is closed for business, the Initial Effectiveness Deadline shall be extended to the next Business Day on which the SEC is open for business.

(s) “**Initial Filing Date**” means the date on which the Initial Registration Statement is filed with the SEC.

(t) “**Initial Filing Deadline**” means May 20, 2024.

(u) “**Initial Registrable Securities**” means (i) the Purchased Shares issued, (ii) the Warrant Shares issued or issuable upon exercise of the Warrants and (iii) any capital stock of the Company issued or issuable with respect to the Purchased Shares, the Warrant Shares or the Warrants, in each case as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, without regard to any limitations on the exercise of the Warrants.

(v) “**Initial Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering the resale of Initial Registrable Securities.

(w) “**Initial Required Registration Amount**” means the sum of (i) the number of Purchased Shares issued and (ii) the maximum number of Warrant Shares issued and issuable pursuant to the Warrants without giving effect to any limitation on exercise set forth therein and, assuming with respect to the Series B Warrants, that the Maximum Eligibility Number is determined based on a Reset Price equal to \$0.137 (as adjusted for stock splits, stock dividends, recapitalizations, reorganizations, reclassification, combinations, reverse stock splits or other similar events occurring after the date hereof), each as of the Trading Day immediately preceding the applicable date of determination and all subject to adjustment as provided in Section 2(f), without regard to any limitations on the exercise of the Warrants.

(x) “**Investor**” means a Buyer or any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9 and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 9.

(y) “**Maximum Eligibility Number**” shall have the meaning set forth in the Series B Warrants.

(z) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(aa) “**Principal Market**” means The Nasdaq Capital Market.

(bb) “**register**,” “**registered**,” and “**registration**” refer to a registration effected by preparing and filing one or more Registration Statements (as defined below) in compliance with the 1933 Act and pursuant to Rule 415, and the declaration or ordering of effectiveness of such Registration Statement(s) by the SEC.

(cc) “**Registrable Securities**” means the Initial Registrable Securities and the Additional Registrable Securities.

(dd) “**Registration Statement**” means the Initial Registration Statement and the Additional Registration Statement, as applicable.

(ee) “**Required Holders**” means the holders of at least a majority of the Registrable Securities.

(ff) “**Required Registration Amount**” means either the Initial Required Registration Amount or the Additional Required Registration Amount, as applicable.

(gg) “**Reset Price**” shall have the meaning set forth in the Series B Warrants.

(hh) “**Rule 415**” means Rule 415 promulgated under the 1933 Act or any successor rule providing for offering securities on a continuous or delayed basis.

(ii) “**SEC**” means the United States Securities and Exchange Commission.

(jj) “**Series B Warrants**” shall have the meaning set forth in the Securities Purchase Agreement.

(kk) “**Trading Day**” means any day on which the Common Shares are traded on the Principal Market, or, if the Principal Market is not the principal trading market for the Common Shares on such day, then on the principal securities exchange or securities market on which the Common Shares are then traded.

2. Registration.

(a) Initial Mandatory Registration. The Company shall prepare, and, as soon as practicable but in no event later than the Initial Filing Deadline, file with the SEC the Initial Registration Statement on Form F-1 or F-3 covering the resale of all of the Initial Registrable Securities. The Initial Registration Statement prepared pursuant hereto shall register for resale at least the number of Common Shares equal to the Initial Required Registration Amount determined as of the date the Initial Registration Statement is initially filed with the SEC, subject to adjustment as provided in Section 2(f). The Company shall use its reasonable best efforts to have the Initial Registration Statement declared effective by the SEC as soon as practicable, but in no event later than the Initial Effectiveness Deadline. By 9:30 a.m. New York time on the second (2nd) Business Day following the Initial Effective Date, the Company shall file with the SEC in accordance with Rule 424 under the 1933 Act the final prospectus to be used in connection with sales pursuant to such Initial Registration Statement.

(b) Additional Mandatory Registrations. The Company shall prepare, and, as soon as practicable but in no event later than the Additional Filing Deadline, file with the SEC an Additional Registration Statement on Form F-1 or F-3 covering the resale of all of the Additional Registrable Securities not previously registered on an Additional Registration Statement hereunder. To the extent the staff of the SEC does not permit the Additional Required Registration Amount to be registered on an Additional Registration Statement, the Company shall file Additional Registration Statements successively trying to register on each such Additional Registration Statement the maximum number of remaining Additional Registrable Securities until the Additional Required Registration Amount has been registered with the SEC. Each Additional Registration Statement prepared pursuant hereto shall register for resale at least that number of Common Shares equal to the Additional Required Registration Amount determined as of the date such Additional Registration Statement is initially filed with the SEC, subject to adjustment as provided in Section 2(f). The Company shall use its reasonable best efforts to have each Additional Registration Statement declared effective by the SEC as soon as practicable, but in no event later than the Additional Effectiveness Deadline. By 9:30 a.m. New York time on the Business Day following the Additional Effective Date, the Company shall file with the SEC in accordance with Rule 424 under the 1933 Act the final prospectus to be used in connection with sales pursuant to such Additional Registration Statement.

(c) Allocation of Registrable Securities. The initial number of Registrable Securities included in any Registration Statement and any increase or decrease in the number of Registrable Securities included therein shall be allocated pro rata among the Investors based on the number of Registrable Securities held by each Investor at the time the Registration Statement covering such initial number of Registrable Securities or increase or decrease thereof is declared effective by the SEC. In the event that an Investor sells or otherwise transfers any of such Investor's Registrable Securities, each transferee shall be allocated a pro rata portion of the then remaining number of Registrable Securities included in such Registration Statement for such transferor. Any Common Shares included in a Registration Statement and which remain allocated to any Person which ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Investors, pro rata based on the number of Registrable Securities then held by such Investors which are covered by such Registration Statement. In no event shall the Company include any securities other than Registrable Securities on any Registration Statement without the prior written consent of the Required Holders.

(d) Reserved.

(e) Ineligibility for Form F-3. In the event that Form F-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company shall (i) register the resale of the Registrable Securities on Form F-1 or another appropriate form reasonably acceptable to the Required Holders and (ii) undertake to register the Registrable Securities on Form F-3 as soon as such form is available, provided that the Company shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form F-3 covering the Registrable Securities has been declared effective by the SEC.

(f) Sufficient Number of Shares Registered. In the event the number of shares available under a Registration Statement filed pursuant to Section 2(a) or Section 2(b) is insufficient to cover the Required Registration Amount of Registrable Securities required to be covered by such Registration Statement or an Investor's allocated portion of the Registrable Securities pursuant to Section 2(c), the Company shall amend the applicable Registration Statement, or file a new Registration Statement (on the short form available therefor, if applicable), or both, so as to cover at least the Required Registration Amount as of the Trading Day immediately preceding the date of the filing of such amendment or new Registration Statement, in each case, as soon as practicable, but in any event not later than fifteen (15) business days after the necessity therefor arises. The Company shall use its reasonable best efforts to cause such amendment and/or new Registration Statement to become effective as soon as practicable following the filing thereof.

(g) Effect of Failure to File and Obtain and Maintain Effectiveness of Registration Statement. If (i) the Initial Registration Statement when declared effective fails to register the Initial Required Registration Amount of Initial Registrable Securities (a "**Registration Failure**"), (ii) a Registration Statement covering all of the Registrable Securities required to be covered thereby and required to be filed by the Company pursuant to this Agreement is (A) not filed with the SEC on or before the applicable Filing Deadline (a "**Filing Failure**") or (B) not declared effective by the SEC on or before the applicable Effectiveness Deadline, (an "**Effectiveness Failure**") or (iii) on any day after the applicable Effective Date sales of all of the Registrable Securities required to be included on such Registration Statement cannot be made (other than during an Allowable Grace Period (as defined in Section 3(r)) pursuant to such Registration Statement or otherwise (including, without limitation, because of the suspension of trading or any other limitation imposed by an Eligible Market, a failure to keep such Registration Statement effective, a failure to disclose such information as is necessary for sales to be made pursuant to such Registration Statement, a failure to register a sufficient number of Common Shares or a failure to maintain the listing of the Common Shares) (a "**Maintenance Failure**") then, as partial relief for the damages to any holder by reason of any such delay in or reduction of its ability to sell the underlying Common Shares (which remedy shall not be exclusive of any other remedies available at law or in equity, including, without limitation, specific performance or the additional obligation of the Company to register any Cutback Shares), the Company shall pay to each holder of Registrable Securities relating to such Registration Statement an amount in cash equal to two percent (2.0%) of the aggregate Purchase Price (as such term is defined in the Securities Purchase Agreement) of such Investor's Registrable Securities whether or not included in such Registration Statement on each of the following dates: (i) the day of a Registration Failure and on each thirtieth Trading Day thereafter (pro-rated for periods totaling less than thirty Trading Days) until such Registration Failure

is cured, (ii) the day of a Filing Failure and on each thirtieth Trading Day thereafter (pro-rated for periods totaling less than thirty Trading Days) until such Filing Failure is cured; (iii) the day of an Effectiveness Failure and on each thirtieth Trading Day thereafter (pro-rated for periods totaling less than thirty Trading Days) until such Effectiveness Failure is cured; and (iv) the initial day of a Maintenance Failure and on each thirtieth Trading Day thereafter (pro-rated for periods totaling less than thirty Trading Days) until such Maintenance Failure is cured; provided, that aggregate amount of all Registration Delay Payments to all holders shall not exceed \$5,000 per Trading Day and ten percent (10%) of the aggregate Purchase Price (and such reduced amount will be distributed pro rata amongst such holders based on the aggregate Purchase Price), and provided further, that for purposes of this sentence only, “**Trading Day**” shall include only Trading Days on which the SEC’s EDGAR system accepts filings. Notwithstanding anything to the contrary contained herein, no Registration Failure, Filing Failure, Effectiveness Failure or Maintenance Failure shall continue to accrue Registration Delay Payments after the end of the Registration Period. For the avoidance of doubt, in the event of a simultaneous occurrence of a Registration Failure, Filing Failure, Maintenance Failure or Effectiveness Failure, the Company shall only be required to make Registration Delay Payments with respect to one such event. The payments to which a holder shall be entitled pursuant to this Section 2(g) are referred to herein as “**Registration Delay Payments.**” Registration Delay Payments shall be paid on the earlier of (I) the dates set forth above and (II) the third Business Day after the event or failure giving rise to the Registration Delay Payments is cured. In the event the Company fails to make Registration Delay Payments in a timely manner, such Registration Delay Payments shall bear interest at the rate of one and one-half percent (1.5%) per month (prorated for partial months) until paid in full.

3. Related Obligations.

At such time as the Company is obligated to file a Registration Statement with the SEC pursuant to Section 2(a), 2(b), 2(e) or 2(f), the Company will use its reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

(a) The Company shall promptly prepare and file with the SEC a Registration Statement with respect to the Registrable Securities and use its reasonable best efforts to cause such Registration Statement relating to the Registrable Securities to become effective as soon as practicable after such filing (but in no event later than the Effectiveness Deadline). The Company shall keep each Registration Statement effective pursuant to Rule 415 at all times until the earlier of (i) the date as of which the Investors may sell all of the Registrable Securities covered by such Registration Statement without restriction or limitation pursuant to Rule 144 and without the requirement to be in compliance with Rule 144(c)(1) (or any successor thereto) promulgated under the 1933 Act or (ii) the date on which the Investors shall have sold all of the Registrable Securities covered by such Registration Statement (the “**Registration Period**”). The Company shall ensure that each Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein (in the case of prospectuses, in the light of the circumstances in which they were made) not misleading. The term “best efforts” shall mean, among other things, that the Company shall submit to the SEC, within two (2) Business Days after the Company learns that no review of a particular Registration Statement will be made by the staff of the SEC or that the staff has no further comments on a particular Registration Statement, as the case may be, a request for acceleration of effectiveness of such Registration Statement to a time and date not later than two (2) Business Days after the submission of such request, unless the Company is directed to submit a request for acceleration of effectiveness of such Registration Statement to a later time and date by the SEC. The Company shall respond in writing to comments made by the SEC in respect of a Registration Statement as soon as practicable, but in no event later than fifteen (15) business days after the receipt of comments by or notice from the SEC that an amendment is required in order for a Registration Statement to be declared effective.

(b) The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the

Company covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of the Company filing a report on Form 20-For Form 6-K or any analogous report under the Securities Exchange Act of 1934, as amended (the “**1934 Act**”), the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the SEC on the same day on which the 1934 Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement.

(c) Reserved.

(d) The Company shall furnish to each Investor whose Registrable Securities are included in any Registration Statement, without charge, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference, if requested by an Investor, all exhibits and each preliminary prospectus, (ii) upon the effectiveness of any Registration Statement, ten (10) copies of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as such Investor may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as such Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by such Investor.

(e) The Company shall use its reasonable best efforts to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by Investors of the Registrable Securities covered by a Registration Statement under such other securities or “blue sky” laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify each Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(f) The Company shall notify each Investor in writing of the happening of any event, as promptly as practicable after becoming aware of such event but in any event on the same Trading Day as such event, as a result of which the prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, nonpublic information), and, subject to Section 3(r), promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver ten (10) copies of such supplement or amendment to each Investor (or such other number of copies as such Investor may reasonably request). The Company shall also promptly notify each Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to each Investor by facsimile or email on the same day of such effectiveness and by overnight mail), (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related prospectus or related information and (iii) of the Company’s reasonable determination that a post-effective amendment to a Registration Statement would be appropriate. By 9:30 a.m. New York City time on the date following the date any post-effective amendment has become effective, the Company shall file with the SEC in accordance with Rule 424 under the 1933 Act the final prospectus to be used in connection with sales pursuant to such Registration Statement.

(g) The Company shall use its reasonable best efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify each Investor who holds Registrable Securities being sold of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

(h) If any Investor is required under applicable securities laws to be described in the Registration Statement as an underwriter or an Investor believes that it could reasonably be deemed to be an underwriter of Registrable Securities, at the reasonable request of such Investor, the Company shall furnish to such Investor, on the date of the effectiveness of the Registration Statement and thereafter from time to time on such dates as an Investor may reasonably request (i) a letter, dated such date, from the Company's independent certified public accountants in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the Investors, and (ii) an opinion, dated as of such date, of counsel representing the Company for purposes of such Registration Statement, in form, scope and substance as is customarily given in an underwritten public offering, addressed to the Investors.

(i) If any Investor is required under applicable securities laws to be described in the Registration Statement as an underwriter or an Investor believes that it could reasonably be deemed to be an underwriter of Registrable Securities, the Company shall make available for inspection by such Investor all pertinent financial and other records, and pertinent corporate documents and properties of the Company (collectively, the "**Records**"), as shall be reasonably deemed necessary by such Investor, and cause the Company's officers, directors and employees to supply all information which any Investor may reasonably request; provided, however, that each Investor shall agree to hold in strict confidence and shall not make any disclosure (except to an Investor) or use of any Record or other information which the Company determines in good faith to be confidential, and of which determination the Investors are so notified, unless (a) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required under the 1933 Act, (b) the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction, or (c) the information in such Records has been made generally available to the public other than by disclosure in violation of this Agreement. Each Investor agrees that it shall, upon learning that disclosure of such Records is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt notice to the Company and allow the Company, at its expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, the Records deemed confidential. Nothing herein (or in any other confidentiality agreement between the Company and any Investor) shall be deemed to limit the Investors' ability to sell Registrable Securities in a manner which is otherwise consistent with applicable laws and regulations.

(j) The Company shall hold in confidence and not make any disclosure of information concerning an Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement. The Company agrees that it shall, upon learning that disclosure of such information concerning an Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to such Investor and allow such Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

(k) The Company shall use its reasonable best efforts either to (i) cause all of the Registrable Securities covered by a Registration Statement to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange or (ii) secure the inclusion for quotation of all of the Registrable Securities on the Principal Market or (iii) if, despite the Company's reasonable best efforts, the Company is unsuccessful in satisfying the preceding clauses (i) and (ii), to secure the inclusion for quotation on an Eligible Market for such Registrable Securities and, without limiting the generality of the foregoing, to use its reasonable best efforts to arrange for at least two market makers to register with the Financial Industry Regulatory Authority, Inc. as such with respect to such Registrable Securities. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(k).

(l) The Company shall cooperate with the Investors who hold Registrable Securities being offered and, to the extent applicable, facilitate the timely preparation and delivery of certificates (not bearing any restrictive legend) representing the Registrable Securities to be offered pursuant to a Registration Statement and enable such certificates to be in such denominations or amounts, as the case may be, as the Investors may reasonably request and registered in such names as the Investors may request.

(m) If requested by an Investor, the Company shall as soon as practicable (i) incorporate in a prospectus supplement or post-effective amendment such information as an Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement if reasonably requested by an Investor holding any Registrable Securities.

(n) The Company shall use its reasonable best efforts to cause the Registrable Securities covered by a Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities.

(o) The Company shall make generally available to its security holders as soon as practical, but not later than ninety (90) days after the close of the period covered thereby, an earnings statement (in form complying with, and in the manner provided by, the provisions of Rule 158 under the 1933 Act) covering a twelve-month period beginning not later than the first day of the Company's fiscal quarter next following the applicable Effective Date of a Registration Statement.

(p) The Company shall otherwise use its reasonable best efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

(q) Within two (2) Business Days after a Registration Statement which covers Registrable Securities is declared effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors whose Registrable Securities are included in such Registration Statement) confirmation that such Registration Statement has been declared effective by the SEC.

(r) Notwithstanding anything to the contrary herein, at any time after the Effective Date, the Company may delay the disclosure of material, non-public information concerning the Company the disclosure of which at the time is not, in the good faith opinion of the Board of Directors of the Company and its counsel, in the best interest of the Company and, in the opinion of counsel to the Company, otherwise required (a "Grace Period"); provided, that the Company shall promptly (i) notify the Investors in writing of the existence of material, non-public information giving rise to a Grace Period (provided that in each notice the Company will not disclose the content of such material, non-public information to the Investors) and the date on which the Grace Period will begin, and (ii) notify the Investors in writing of the date on which the Grace Period ends; and, provided further, that no Grace Period shall exceed sixty (60) consecutive days and during any three hundred sixty five (365) day period such Grace Periods shall not exceed

an aggregate of ninety (90) days and the first day of any Grace Period must be at least five (5) Trading Days after the last day of any prior Grace Period (each, an “**Allowable Grace Period**”). For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Investors receive the notice referred to in clause (i) and shall end on and include the later of the date the Investors receive the notice referred to in clause (ii) and the date referred to in such notice. Upon expiration of the Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended Common Shares to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale, prior to the Investor’s receipt of the notice of a Grace Period and for which the Investor has not yet settled.

(s) Neither the Company nor any Subsidiary or affiliate thereof shall identify any Investor as an underwriter in any public disclosure or filing with the SEC, the Principal Market or any Eligible Market and any Investor being deemed an underwriter by the SEC shall not relieve the Company of any obligations it has under this Agreement or any other Transaction Document (as defined in the Securities Purchase Agreement).

(t) Neither the Company nor any of its Subsidiaries has entered, as of the date hereof, nor shall the Company or any of its Subsidiaries, on or after the date of this Agreement, enter into any agreement with respect to its securities, that would have the effect of impairing the rights granted to the Buyers in this Agreement or otherwise conflicts with the provisions hereof.

4. Obligations of the Investors.

(a) At least five (5) Business Days prior to the Initial Filing Date of a Registration Statement, the Company shall notify each Investor in writing of the information the Company requires from each such Investor if such Investor elects to have any of such Investor’s Registrable Securities included in such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete any registration pursuant to this Agreement with respect to the Registrable Securities of a particular Investor that such Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect and maintain the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request.

(b) Each Investor, by such Investor’s acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder, unless such Investor has notified the Company in writing of such Investor’s election to exclude all of such Investor’s Registrable Securities from such Registration Statement.

(c) Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in the first sentence of Section 3(f), such Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until such Investor’s receipt of copies of the supplemented or amended prospectus as contemplated by the first sentence of Section 3(f) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended Common Shares to a transferee of an Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor’s receipt of a notice from the Company of the happening of any event of the kind described in the first sentence of Section 3(f) and for which the Investor has not yet settled.

(d) Each Investor covenants and agrees that it will comply with the prospectus delivery requirements of the 1933 Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to the Registration Statement.

5. Expenses of Registration.

All reasonable expenses, other than underwriting discounts and commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company shall be paid by the Company.

6. Indemnification.

In the event any Registrable Securities are included in a Registration Statement under this Agreement:

(a) To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend each Investor, the directors, officers, partners, members, employees, agents, representatives of, and each Person, if any, who controls any Investor within the meaning of the 1933 Act or the 1934 Act (each, an “**Indemnified Person**”), against any losses, claims (including causes of action, suits or claims asserted directly by or between an Indemnitee and the Company), damages, liabilities, judgments, fines, penalties, charges, costs, reasonable attorneys’ fees, amounts paid in settlement or expenses, joint or several (collectively, “**Claims**”), incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto (“**Indemnified Damages**”), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other “blue sky” laws of any jurisdiction in which Registrable Securities are offered, or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus if used prior to the Effective Date of such Registration Statement, or contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, (iii) any violation or alleged violation by the Company of the 1933 Act, the 1934 Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to a Registration Statement or (iv) any violation of this Agreement (the matters in the foregoing clauses (i) through (iv) being, collectively, “**Violations**”). Subject to Section 6(c), the Company shall reimburse the Indemnified Persons, promptly as such expenses are incurred and are due and payable, for any legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Indemnified Person expressly for use in connection with the preparation of the Registration Statement or any such amendment thereof or supplement thereto, if such prospectus was timely made available by the Company pursuant to Section 3(d); (ii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed ; and (iii) shall not apply to amounts paid in settlement of any direct Claim by or between an Indemnitee and the Company. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investors pursuant to Section 9.

(b) In connection with any Registration Statement in which an Investor is participating, each such Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same

manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each, an “**Indemnified Party**”), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information furnished to the Company by such Investor expressly for use in connection with such Registration Statement; and, subject to Section 6(c), such Investor shall reimburse the Indemnified Party for any legal or other expenses reasonably incurred by an Indemnified Party in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Investor, which consent shall not be unreasonably withheld or delayed; provided, further, however, that the Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of the Registrable Securities by the Investors pursuant to Section 9.

(c) Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and, except in the case of a direct Claim, for which the remainder of this Section 6(c) shall not apply, the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for all such Indemnified Person or Indemnified Party to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the Indemnified Person or Indemnified Party, as applicable, the representation by such counsel of the Indemnified Person or Indemnified Party, as the case may be, and the indemnifying party would be inappropriate due to actual differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. In the case of an Indemnified Person, legal counsel referred to in the immediately preceding sentence shall be selected by the Investors holding at least a majority in interest of the Registrable Securities included in the Registration Statement to which the Claim relates. The Indemnified Party or Indemnified Person shall reasonably cooperate with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or Claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such Claim or litigation and such settlement shall not include any admission as to fault on the part of the Indemnified Party or Indemnified Person. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action by such lack of notice.

(d) The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

(e) The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the amount of net proceeds received by such seller from the sale of such Registrable Securities pursuant to such Registration Statement.

8. Reports Under the 1934 Act.

With a view to making available to the Investors the benefits of Rule 144 promulgated under the 1933 Act or any other similar rule or regulation of the SEC that may at any time permit the Investors to sell securities of the Company to the public without registration (“**Rule 144**”), the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144;

(b) file with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

(c) furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company, if true, that it has complied with the reporting requirements of Rule 144, the 1933 Act and the 1934 Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

9. Assignment of Registration Rights.

The rights under this Agreement shall be automatically assignable by the Investors to any transferee of all or any portion of such Investor’s Registrable Securities if: (i) the Investor agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such assignment; (ii) the Company is, within a reasonable time after such transfer or assignment, furnished with written notice of (a) the name and address of such transferee or assignee, and (b) the securities with respect to which such registration rights are being transferred or assigned; (iii) immediately following such transfer or assignment the further disposition of such securities by the transferee or assignee is restricted under the 1933 Act or applicable state securities laws; (iv) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained

herein; and (v) such transfer shall have been made in accordance with the applicable requirements of the Securities Purchase Agreement.

10. Amendment of Registration Rights.

Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Holders; provided that any such amendment or waiver that complies with the foregoing but that disproportionately, materially and adversely affects the rights and obligations of any Investor relative to the comparable rights and obligations of the other Investors shall require the prior written consent of such adversely affected Investor. Any amendment or waiver effected in accordance with this Section 10 shall be binding upon each Investor and the Company. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Registrable Securities. No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration (other than the reimbursement of legal fees) also is offered to all of the parties to this Agreement.

11. Miscellaneous.

(a) A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from such record owner of such Registrable Securities.

18

(b) Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon delivery, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party), (iii) upon delivery, when sent by electronic mail (provided that the sending party does not receive an automated rejection notice); or (iv) one Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses, facsimile numbers and e-mail addresses for such communications shall be:

If to the Company:

Tantech Holdings Ltd
No. 10 Cen Shan Road, Shuige Industrial Zone
Lishui City, Zhejiang Province 323000
People's Republic of China
Attention: Wangfeng Yan
Email: tantech@tantech.cn

With a copy (for informational purposes only) to:

Kaufman & Canoles, P.C.
1021 E. Cary Street, Suite 1400
Two James Center
Richmond, VA 23219
Attention: Anthony W. Basch, Esq.
Yan (Natalie) Wang, Esq.
Email: awbasch@kaufcan.com
ywang@kaufcan.com

If to a Buyer, to its address, facsimile number or email address set forth on the Schedule of Buyers attached hereto, with copies to such Buyer's representatives as set forth on the Schedule of Buyers, or to such other address, facsimile number and/or email address to the attention of such other Person as the recipient party has specified by written notice

given to each other party five (5) days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or e-mail transmission containing the time, date, recipient facsimile number or e-mail address and an image of the first page of such transmission or (C) provided by a courier or overnight courier service shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

(c) Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

(d) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in The City of New York, Borough of Manhattan, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(e) If any provision of this Agreement is prohibited by law or otherwise determined to be invalid or unenforceable by a court of competent jurisdiction, the provision that would otherwise be prohibited, invalid or unenforceable shall be deemed amended to apply to the broadest extent that it would be valid and enforceable, and the invalidity or unenforceability of such provision shall not affect the validity of the remaining provisions of this Agreement so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter hereof and the prohibited nature, invalidity or unenforceability of the provision(s) in question does not substantially impair the respective expectations or reciprocal obligations of the parties or the practical realization of the benefits that would otherwise be conferred upon the parties. The parties will endeavor in good faith negotiations to replace the prohibited, invalid or unenforceable provision(s) with a valid provision(s), the effect of which comes as close as possible to that of the prohibited, invalid or unenforceable provision(s).

(f) This Agreement, the other Transaction Documents (as defined in the Securities Purchase Agreement) and the instruments referenced herein and therein constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement, the other Transaction Documents and the instruments referenced herein and therein supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

(g) Subject to the requirements of Section 9, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

(h) The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(i) This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may

be delivered to the other party hereto by facsimile transmission of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

20

(j) Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(k) All consents and other determinations required to be made by the Investors pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders, determined as if all of the Warrants held by Investors then outstanding have been exercised for Registrable Securities without regard to any limitations on exercise of the Warrants.

(l) The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

(m) This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

(n) The obligations of each Investor hereunder are several and not joint with the obligations of any other Investor, and no provision of this Agreement is intended to confer any obligations on any Investor vis-à-vis any other Investor. Nothing contained herein, and no action taken by any Investor pursuant hereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated herein.

* * * * *

[Signature Page Follows]

21

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

COMPANY:

Tantech Holdings Ltd

By: _____

Name:

Title:

[Signature Page to Registration Rights Agreement]

22

IN WITNESS WHEREOF, each Buyer and the Company have caused their respective signature page to this Registration Rights Agreement to be duly executed as of the date first written above.

BUYER:

By: _____
Name:
Title:

[Signature Page to Registration Rights Agreement]

SCHEDULE OF BUYERS

Buyer	Buyer Address, Facsimile Number and E-mail	Buyer's Representative's Address, Facsimile Number and E-Mail
--------------	---	--

April 22, 2024

Mr. Wangfeng Yan
Chief Executive Officer
Tantech Holdings Ltd.
No. 10 Cen Shan Road, Shuige Industrial Zone
Lishui City, Zhejiang Province 323000
People's Republic of China

Dear Mr. Yan:

This letter (the "Agreement") constitutes the agreement between Maxim Group LLC ("Maxim" or the "Placement Agent") and Tantech Holdings Ltd., a British Virgin Islands company (the "Company"), that Maxim shall serve as the exclusive placement agent for the Company, on a "reasonable best efforts" basis, in connection with the proposed private placement (the "Placement") of shares (the "Shares") of the Company's common shares, par value \$0.24 (the "Common Stock"), pre-funded warrants to purchase Common Stock (the "Pre-Funded Warrants"), Series A warrants to purchase Common Stock (the "Series A Warrants") and Series B warrants to purchase Common Stock (the "Series B Warrants"), collectively with the Series A Warrants, the "Common Warrants", collectively with the Pre-Funded Warrants, the "Warrants," and the shares issuable upon exercise of the Warrants, the "Warrant Shares" and the Shares, Warrants and Warrant Shares, collectively, the "Securities"). The terms of the Placement shall be mutually agreed upon by the Company, Maxim and the purchasers of the Securities (each, a "Purchaser" and collectively, the "Purchasers") and nothing herein constitutes that Maxim would have the power or authority to bind the Company or any Purchaser or an obligation for the Company to issue any Securities or complete the Placement. This Agreement and the documents executed and delivered by the Company and the Purchasers in connection with the Placement, including the Purchase Agreement (as hereinafter defined) shall be collectively referred to herein as the "Transaction Documents." Each date on which there is a closing (each a "Closing") of the Placement shall be referred to herein as a "Closing Date." The Company expressly acknowledges and agrees that Maxim's obligations hereunder are on a commercially reasonable efforts basis only and that the execution of this Agreement does not constitute a legal or binding commitment by Maxim to purchase the Securities or introduce the Company to investors and does not ensure the successful placement of the Securities or any portion thereof or the success of Maxim with respect to securing any other financing on behalf of the Company. The Placement Agent may retain other brokers or dealers to act as sub-agents or selected-dealers on its behalf in connection with the Placement. The sale of the Securities to any Purchaser will be evidenced by a securities purchase agreement (the "Purchase Agreement") between the Company and such Purchaser in a form reasonably acceptable to the Company and Maxim. Prior to the signing of the Purchase Agreement, officers of the Company will be available to answer inquiries from prospective Purchasers.

Notwithstanding anything herein to the contrary, in the event Maxim determines that any of the terms provided for hereunder shall not comply with a FINRA rule, including but not limited to FINRA Rule 5110, then the Company shall agree to amend this Agreement in writing upon the request of Maxim to comply with any such rules; provided that any such amendments shall not provide for terms that are less favorable to the Company.

Unless otherwise provided, all dollar amounts in this Agreement shall be U.S. dollars.

SECTION 1. COMPENSATION. As compensation for the services provided by Maxim hereunder, the Company agrees to pay to Maxim:

(A) A cash fee payable in U.S. dollars equal to seven and a half percent (7.5%) of the gross proceeds received by the Company from Purchasers at each Closing (the "Cash Compensation"). The Cash Compensation shall be paid by wire transfer on the date of each Closing of the Placement from the gross proceeds of the Securities sold.

(B) The Company also agrees to reimburse Maxim at each Closing for all of Maxim's reasonable accountable expenses, including, without limitation, fees and disbursements of Maxim's counsel and all travel and other out-of-pocket expenses, incurred by Maxim in connection with the Placement, up to a maximum aggregate amount of \$50,000. Expenses will be reimbursed on the date of the initial Closing.

(C) If within six (6) months of the Closing, the Company completes any financing of equity or equity-linked capital-raising activity with, or receives proceeds from, any of the investors that were brought over the wall by the Placement Agent in connection with the Placement, then the Company shall pay to the Placement Agent upon closing of such financing or receipt of such proceeds the compensation equivalent to that set forth in Section 1(A) herein, provided, that, within five (5) business days following the Termination Date, the Placement Agent provides a list to the Company of such investors.

SECTION 2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. Each of the representations and warranties (together with any related disclosures in any disclosure schedules appended thereto) made by the Company to the Purchasers in the Transaction Documents, is hereby incorporated herein by reference (as though fully restated herein) and is, as of the date of this Agreement, hereby made to, and in favor of, the Placement Agent. In addition to the foregoing, the Company represents and warrants to the Placement Agent that:

(A) (i) the Company has full right, power and authority to enter into this Agreement and to perform all of its obligations hereunder; (ii) this Agreement has been duly authorized and executed and constitutes a legal, valid and binding agreement of such party enforceable in accordance with its terms; and (iii) the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby does not conflict with or result in a breach of (y) the Company's certificate of incorporation or by-laws or other charter documents or (z) any agreement to which the Company is a party or by which any of its property or assets is bound.

(B) All disclosure provided by the Company to the Placement Agent regarding the Company, its business and the transactions contemplated hereby, taken together with all filings the Company has made with the Securities and Exchange Commission, is true and correct in all material aspects and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in the light of the circumstances under which they were made, not misleading. Each filing made by the Company with the Securities and Exchange Commission since January 1, 2023 did not at the time of release contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. To the best of the Company's knowledge and belief, other than the current capital raising (of which this Agreement forms a part), no event or circumstance has occurred or information exists with respect to the Company or its business, properties, prospects, operations or financial conditions, which, under the applicable laws, rules or regulations, requires public disclosure or announcement by the Company but which has not been so publicly announced or disclosed.

(C) The Company has not taken and will not take any action, directly or indirectly, so as to cause the Placement to fail to be entitled to rely upon the exemption from registration afforded by Section 4(a)(2) of the Securities Act of 1933, as amended (the "Act"). In effecting the Placement, the Company agrees to comply in all material respects with applicable provisions of the Act and any regulations thereunder and any applicable laws, rules, regulations and requirements (including, without limitation, all U.S. state law and all national, provincial, city or other legal requirements).

(D) The Company has the power to submit, and pursuant to Section 10 of this Agreement, has legally, validly, effectively and irrevocably submitted, to the non-exclusive personal jurisdiction of the New York State Supreme Court, County of New York, and the United States District Court for the Southern District of New York (each, a "New York Court"). The Company has the power to designate, appoint and authorize, and pursuant to Section 10 of this Agreement, has legally, validly, effectively and irrevocably designated, appointed an authorized agent for service of process in any action arising out of or relating to this Agreement or the Placement in any New York Court, and service of process effected on such authorized agent will be effective to confer valid personal jurisdiction over the Company as provided in Section 10 of this Agreement.

SECTION 3. REPRESENTATIONS OF MAXIM. Maxim represents and warrants that it (i) is a member in good standing of FINRA, (ii) is registered as a broker/dealer under the Securities Exchange Act of 1934, as amended, (iii) is licensed as a broker/dealer under the laws of the states applicable to the offers and sales of the Securities by Maxim, (iv) is and will be a body corporate validly existing under the laws of its place of incorporation; (v) has full power and authority to enter into and perform its obligations under this Agreement, (vi) the Placement Agent has not taken and will not take any action, directly or indirectly, so as to cause the Placement to fail to be entitled to rely upon the exemption from registration afforded by Section 4(a)(2) of the Act; (vii) in effecting the Placement, the Placement Agent agrees to comply in all material respects with applicable provisions of the Act and any regulations thereunder and any applicable laws, rules, regulations and requirements (including, without limitation, all U.S. state law and all national, provincial, city or other legal requirements), (viii) this Agreement has been duly authorized and executed and constitutes a legal, valid and binding agreement of Maxim enforceable in accordance with its terms, and (ix) neither the Placement Agent, any person compensated for soliciting investors in the Placement, nor any general partner, managing member, executive officer, director or officer of the Placement Agent participating in the Placement is subject to any of the “Bad Actor” disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a “Disqualification Event”), except for a Disqualification Event covered by Rule 506(d)(2). Maxim will immediately notify the Company in writing of any change in its status as such. Maxim covenants that it will use its reasonable best efforts to conduct the Placement hereunder in compliance with the provisions of this Agreement and the requirements of applicable law.

SECTION 4. INDEMNIFICATION. The Company agrees to the indemnification and other agreements set forth in the Indemnification Provisions (the “Indemnification”) attached hereto as Addendum A, the provisions of which are incorporated herein by reference and shall survive the termination or expiration of this Agreement.

SECTION 5. ENGAGEMENT TERM.

(A) The Placement Agent’s engagement hereunder shall be until the earlier of: (i) the final Closing Date of the Placement, (ii) a ten (10) days’ prior written notice by the Company or Maxim after June 4, 2024, or (iii) earlier termination of the engagement of the Placement Agent for Cause by the Company (such date, the “Termination Date”). The engagement hereunder may also be earlier terminated for Cause. “Cause,” for the purpose of this Agreement, shall mean, as determined by a court of competent jurisdiction, the Placement Agent’s gross negligence, willful misconduct, or material breach of this Agreement (including without limitation, failure to proceed in good faith or reasonable best efforts for the Placement), after being notified in writing of such conduct, and not curing such alleged conduct within ten (10) days of notification.

(B) Notwithstanding anything herein to the contrary, Section 1, Section 4, this Section 5, Sections 10, 11 and 12 and all of Addendum A attached hereto (the terms of which are incorporated by reference hereto), will survive any termination or expiration of this Agreement. The termination of this Agreement shall not affect the Company’s obligation to pay fees to the extent provided for in Section 1 herein and shall not affect the Company’s obligation to reimburse the expenses accruing prior to such Termination Date to the extent provided for herein. All such accrued fees and reimbursements due shall be paid to the Placement Agent on or before the Termination Date (in the event such fees and reimbursements are earned or owed as of the Termination Date) or upon the Closing of the Placement or any applicable portion thereof (in the event such fees are due pursuant to the terms of Section 1 hereof).

SECTION 6. MAXIM INFORMATION. The Company agrees that any information or advice rendered by Maxim in connection with this engagement is for the confidential use of the Company only in their evaluation of the Placement and, except as otherwise required by law, the Company will not disclose or otherwise refer to the advice or information in any manner without Maxim’s prior written consent.

SECTION 7. NO FIDUCIARY RELATIONSHIP; SECURITIES AND OTHER LAW COMPLIANCE.

(A) This Agreement does not create, and shall not be construed as creating rights enforceable by any person or entity not a party hereto, except those entitled hereto by virtue of the Indemnification Provisions hereof. The Company acknowledges and agrees that Maxim is not and shall not be construed as a fiduciary of the Company and shall have no duties or liabilities to the equity holders or the creditors of the Company or any other person by virtue of this Agreement or the retention of Maxim hereunder, all of which are hereby expressly waived.

(B) The Company, at its own expense, will use its best efforts to obtain any registration, qualification or approval required to sell any Securities under the laws (including U.S. state "blue sky" laws) of any applicable jurisdictions.

SECTION 8. CLOSING. The obligations of the Placement Agent hereunder, and the closing of the sale of the Securities pursuant to the Purchase Agreement are subject to the accuracy, when made and on each Closing Date, of the representations and warranties on the part of the Company and its subsidiaries contained herein and in the Purchase Agreement, to the accuracy of the statements of the Company and its subsidiaries made in any certificates pursuant to the provisions hereof, to the performance by the Company and its subsidiaries of their obligations hereunder, and to each of the following additional terms and conditions:

(A) All corporate proceedings and other legal matters incident to the authorization, form, execution, delivery and validity of each of this Agreement, the Securities and all other legal matters relating to this Agreement and the transactions contemplated hereby shall be reasonably satisfactory in all material respects to counsel for the Placement Agent, and the Company shall have furnished to such counsel all documents and information that they may reasonably request to enable them to pass upon such matters.

(B) The Placement Agent shall have received as of each Closing Date the favorable opinions of counsels to the Company, dated as of such Closing Date, addressed to the Placement Agent in form and substance satisfactory to the Placement Agent.

(C) (i) Neither the Company nor any of its subsidiaries shall have sustained, since the date of the latest audited or unaudited financial statements included or incorporated by reference in its reports publicly filed with the Securities and Exchange Commission, any material loss or interference with its business from fire, explosion, flood, terrorist act or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth in or contemplated by the Purchase Agreement and disclosure schedules thereto and (ii) since such date there shall not have been any change in the capital stock or long-term debt of the Company or any of its subsidiaries or any change, or any development involving a prospective change, in or affecting the business, general affairs, management, financial position, shareholders' equity, results of operations or prospects of the Company and its subsidiaries, otherwise as set forth in or contemplated by the Purchase Agreement and disclosure schedules thereto, the effect of which, in any such case described in clause (i) or (ii), is, in the reasonable judgment of the Placement Agent, so material and adverse as to make it impracticable or inadvisable to proceed with the sale or delivery of the Securities on the terms and in the manner contemplated by the Purchase Agreement and disclosure schedules thereto.

(D) Subsequent to the execution and delivery of this Agreement and up to the Closing Date, there shall not have occurred any of the following: (i) trading in the Company's securities generally on the applicable trading market shall have been suspended or minimum or maximum prices or maximum ranges for prices shall have been established on any such exchange or such market by the Securities and Exchange Commission or by such exchange or by any other regulatory body or governmental authority having jurisdiction, (ii) a banking moratorium shall have been declared by federal or state authorities or a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States, (iii) the United States shall have become engaged in hostilities in which it is not currently engaged, the subject of an act of terrorism, there shall have been an escalation in hostilities involving the United States, or there shall have been a declaration of a national emergency or war by the United States, or (iv) there shall have occurred any other calamity or crisis or any change in general economic, political or financial conditions in the United States or elsewhere, if the effect of any such event in clause (iii) or (iv) that makes it, in

the sole and reasonable judgment of the Placement Agent, impracticable or inadvisable to proceed with the sale or delivery of the Securities on the terms and in the manner contemplated by the Purchase Agreement.

(E) No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any governmental agency or body which would, as of the Closing Date, prevent the issuance or sale of the Securities or materially and adversely affect the business or operations of the Company; and no injunction, restraining order or order of any other nature by any federal or state court of competent jurisdiction shall have been issued as of the Closing Date which would prevent the issuance or sale of the Securities or materially and adversely affect the business or operations of the Company.

(F) The Company shall have entered into a Purchase Agreement with each of the Purchasers and such agreements shall be in full force and effect and shall contain representations, warranties and covenants of the Company as agreed between the Company and the Purchasers.

(G) On or prior to the Closing Date, the Company shall have furnished to the Placement Agent such further information, certificates and documents as the Placement Agent may reasonably request, including a secretary certificate and officer certificate in form and substance reasonably acceptable to the Placement Agent.

All opinions, letters, evidence and certificates mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Placement Agent.

SECTION 9. RIGHT OF FIRST REFUSAL Subject to the completion of any Closing of a Placement, for a period of six (6) months after the final Closing, the Company grants the Placement Agent the right of first refusal to act as sole managing underwriter and sole book runner, sole placement agent, or sole sales agent, for any and all future public and private equity, equity-linked or debt offerings, subject to the exceptions set forth below, during such six (6) month period of the Company, or any successor to or any subsidiary of the Company (a "Subsequent Offering"). For the avoidance of doubt, Subsequent Offerings shall not include any transaction excluded from the Investment Proposals (defined in Section 1(b) of the Engagement Letter (defined below)). The Company shall provide the Placement Agent with written notice of no less than three (3) business days following its election to engage in a Subsequent Offering, which notice shall describe the proposed terms and conditions of such Subsequent Offering. The Placement Agent shall notify the Company within three (3) days of its receipt of the written offer contemplated above as to whether it agrees to accept such retention. If the Placement Agent declines to exercise its right of first refusal, the Company shall have the right to retain any other entity or person in connection with the Subsequent Offering on terms which are not materially more favorable to such other entity or person than the terms declined by the Placement Agent. If Placement Agent should decline to exercise its right of first refusal, the Company shall have no further obligation to the Placement Agent with respect to such other Subsequent Offering, except as otherwise provided for herein.

SECTION 10. GOVERNING LAW. This Agreement will be governed by, and construed in accordance with, the laws of the State of New York applicable to agreements made and to be performed entirely in such State. This Agreement may not be assigned by either party without the prior written consent of the other party. This Agreement shall be binding upon and inure to the benefit of the parties hereto, and their respective successors and permitted assigns. Any right to trial by jury with respect to any dispute arising under this Agreement or any transaction or conduct in connection herewith is waived. Each of the Placement Agent and the Company: (i) agrees that any legal suit, action or proceeding arising out of or relating to this Agreement and/or the transactions contemplated hereby shall be instituted exclusively in New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York, (ii) waives any objection which it may have or hereafter to the venue of any such suit, action or proceeding, and (iii) irrevocably consents to the jurisdiction of the New York Supreme Court, County of New York, and the United States District Court for the Southern District of New York in any such suit, action or proceeding. Each of the Placement Agent and the Company further agrees to accept and acknowledge service of any and all process which may be served in any such suit, action or proceeding in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York and agrees that service of process upon the Company mailed by certified mail or private carrier (Federal Express, UPS or equivalent) to the Company's address shall be deemed in every respect effective service of process upon the Company, in any such suit,

action or proceeding, and service of process upon the Placement Agent mailed by certified mail or private carrier (Federal Express, UPS or equivalent) to the Placement Agent's address shall be deemed in every respect effective service process upon the Placement Agent, in any such suit, action or proceeding. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If either party shall commence an action or proceeding to enforce any provisions of a Transaction Document, the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorney's fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

SECTION 11. ENTIRE AGREEMENT/MISC. This Agreement (including the attached Indemnification Provisions) embodies the entire agreement and understanding between the parties hereto, and supersedes all prior agreements and understandings, relating to the subject matter hereof. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, such determination will not affect such provision in any other respect or any other provision of this Agreement, which will remain in full force and effect. This Agreement may not be amended or otherwise modified or waived except by an instrument in writing signed by both Maxim and the Company. The representations, warranties, agreements and covenants contained herein shall survive the closing of the Placement and delivery of the Securities, as applicable. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or a .pdf format file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or .pdf signature page were an original thereof. The Company agrees that the Placement Agent may rely upon, and is a third party beneficiary of, the representations and warranties, and applicable covenants set forth in the Purchase Agreement. Notwithstanding anything herein to the contrary, the Engagement Letter, dated March 4, 2024 (the "Engagement Letter"), by and between the Company and Maxim, including but not limited to Sections 4(a) and 8 of the Engagement Letter, shall continue to be effective as provided therein and the terms that shall survive the termination or expiration of the Engagement Letter as described therein shall continue to survive and be enforceable by the parties in accordance with its terms, provided that, in the event of a conflict between the terms of the Engagement Letter and this Agreement, this Agreement shall prevail.

7

SECTION 12. NOTICES. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is sent via facsimile or email transmission to the email address specified on the signature pages attached hereto, (b) the date of mailing, if sent by certified mail or by private carrier (Federal Express, UPS or equivalent), or (c) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages hereto.

SECTION 13. SECURITIES AND OTHER LAW COMPLIANCE. The Company, at its own expense, will use its best efforts to obtain any registration, qualification or approval required to sell any securities under the laws (including U.S. state "blue-sky" laws) of any applicable jurisdictions or any instrumentality thereof.

SECTION 14. PRESS ANNOUNCEMENTS. The Company agrees that the Placement Agent shall, from and after any Closing, have the right to reference the Placement and the Placement Agent's role in connection therewith in the Placement Agent's marketing materials and on its website and to place advertisements in financial and other newspapers and journals, in each case at its own expense.

[The remainder of this page has been intentionally left blank.]

8

Please confirm that the foregoing correctly sets forth our agreement by signing and returning to Maxim the enclosed copy of this Agreement.

Very truly yours,

Maxim GROUP LLC

By: _____
Name: Clifford A. Teller
Title: Executive Managing Director, IB

Address for notice:
300 Park Avenue, 16th Floor
New York, NY 10022
Attention: James Siegel, General Counsel
Email: jsiegel@maximgrp.com

Accepted and Agreed to as of
the date first written above:

TANTECH HOLDINGS LTD.

By: _____
Name:
Title:

Address for notice:

ADDENDUM A

INDEMNIFICATION PROVISIONS

Capitalized terms used in this Addendum shall have the meanings ascribed to such terms in the Agreement to which this Addendum is attached:

In addition to and without limiting any other right or remedy available to the Placement Agent and the Indemnified Parties (as hereinafter defined), the Company agrees to indemnify and hold harmless Placement Agent and each of the other Indemnified Parties from and against any and all losses, claims, damages, obligations, penalties, judgments, awards, liabilities, costs, expenses and disbursements, and any and all actions, suits, proceedings and investigations in respect thereof and any and all legal and other costs, expenses and disbursements in giving testimony or furnishing documents in response to a subpoena or otherwise (including, without limitation, the reasonable costs, expenses and disbursements, as and when incurred, of investigating, preparing, pursuing or defending any such action, suit, proceeding or investigation (whether or not in connection with litigation in which any Indemnified Party is a party)) (collectively, "Losses"), directly or indirectly, caused by, relating to, based upon, arising out of, or in connection with, Placement Agent's acting for the Company, including, without limitation, any act or omission by Placement Agent in connection with its acceptance of or the performance or non-performance of its obligations under the Agreement between the Company and Placement Agent to which these indemnification provisions are attached and form a part, any breach by the Company of any representation, warranty, covenant or agreement contained in the Agreement (or in any instrument, document or agreement relating thereto, including any agency agreement), or the enforcement by Placement Agent of its rights under the Agreement or these indemnification provisions, except to the extent that any such Losses are found in a final judgment by a court of competent jurisdiction (not subject to further appeal) to have resulted primarily and directly from the gross negligence or willful misconduct of the Indemnified Party seeking indemnification hereunder.

The Company also agrees that no Indemnified Party shall have any liability (whether direct or indirect, in contract or tort or otherwise) to the Company for or in connection with the engagement of Placement Agent by the

Company or for any other reason, except to the extent that any such liability is found in a final judgment by a court of competent jurisdiction (not subject to further appeal) to have resulted primarily and directly from such Indemnified Party's gross negligence or willful misconduct.

These Indemnification Provisions shall extend to the following persons (collectively, the "Indemnified Parties"): Placement Agent, its present and former affiliated entities, managers, members, officers, employees, legal counsel, agents and controlling persons (within the meaning of the federal securities laws), and the officers, directors, partners, stockholders, members, managers, employees, legal counsel, agents and controlling persons of any of them. These indemnification provisions shall be in addition to any liability, which the Company may otherwise have to any Indemnified Party.

If any action, suit, proceeding or investigation is commenced, as to which an Indemnified Party proposes to demand indemnification, it shall notify the Company with reasonable promptness; provided, however, that any failure by an Indemnified Party to notify the Company shall not relieve the Company from its obligations hereunder. An Indemnified Party shall have the right to retain counsel of its own choice to represent it, and the fees, expenses and disbursements of such counsel shall be borne by the Company. Any such counsel shall, to the extent consistent with its professional responsibilities, cooperate with the Company and any counsel designated by the Company. The Company shall be liable for any settlement of any claim against any Indemnified Party made with the Company's written consent. The Company shall not, without the prior written consent of Placement Agent, settle or compromise any claim, or permit a default or consent to the entry of any judgment in respect thereof, unless such settlement, compromise or consent (i) includes, as an unconditional term thereof, the giving by the claimant to all of the Indemnified Parties of an unconditional release from all liability in respect of such claim, and (ii) does not contain any factual or legal admission by or with respect to an Indemnified Party or an adverse statement with respect to the character, professionalism, expertise or reputation of any Indemnified Party or any action or inaction of any Indemnified Party.

In order to provide for just and equitable contribution, if a claim for indemnification pursuant to these indemnification provisions is made but it is found in a final judgment by a court of competent jurisdiction (not subject to further appeal) that such indemnification may not be enforced in such case, even though the express provisions hereof provide for indemnification in such case, then the Company shall contribute to the Losses to which any Indemnified Party may be subject (i) in accordance with the relative benefits received by the Company and its stockholders, subsidiaries and affiliates, on the one hand, and the Indemnified Party, on the other hand, and (ii) if (and only if) the allocation provided in clause (i) of this sentence is not permitted by applicable law, in such proportion as to reflect not only the relative benefits, but also the relative fault of the Company, on the one hand, and the Indemnified Party, on the other hand, in connection with the statements, acts or omissions which resulted in such Losses as well as any relevant equitable considerations. No person found liable for a fraudulent misrepresentation shall be entitled to contribution from any person who is not also found liable for fraudulent misrepresentation. The relative benefits received (or anticipated to be received) by the Company and its stockholders, subsidiaries and affiliates shall be deemed to be equal to the aggregate consideration payable or receivable by such parties in connection with the transaction or transactions to which the Agreement relates relative to the amount of fees actually received by Placement Agent in connection with such transaction or transactions. Notwithstanding the foregoing, in no event shall the amount contributed by all Indemnified Parties exceed the amount of fees previously received by Placement Agent pursuant to the Agreement.

Neither termination nor completion of the Agreement shall affect these Indemnification Provisions which shall remain operative and in full force and effect. The Indemnification Provisions shall be binding upon the Company and its successors and assigns and shall inure to the benefit of the Indemnified Parties and their respective successors, assigns, heirs and personal representatives.

Tantech Holdings Ltd Announces \$2.1 Million Private Placement

LISHUI, China, April 22, 2024 /PRNewswire/ -- Tantech Holdings Ltd (NASDAQ: TANH) (“Tantech” or the “Company”) today announced that it has entered into a securities purchase agreement with institutional investors to raise approximately \$2.1 million in aggregate cash proceeds, before deducting fees to the placement agent and other offering expenses payable by the Company. The closing of the private placement is expected to occur on April 24, 2024, subject to the satisfaction of certain customary closing conditions set forth in the securities purchase agreement.

In connection with the private placement, the Company will issue an aggregate of 4,200,000 units and pre-funded units. The purchase price per unit is \$0.50. The pre-funded units will be sold at the same purchase price as the units, less the pre-funded warrant exercise price of \$0.0001. Each unit and pre-funded unit will consist of one common share (or pre-funded warrant), two Series A warrants each exercisable into one common share at an exercise price of \$0.75 per share, which exercise price is subject to standard adjustments for dividends, splits and similar events and is also subject to adjustment for certain dilutive issuances, upon reset following certain capitalization events (including a reverse stock split) and upon reset on a Reset Date (as defined in the Series B Warrant), and one Series B warrant with an exercise price of \$0.0001 per common share to purchase such amount of common shares as will be determined on the Reset Date (as defined in the Series B Warrant). The Series A and Series B warrants will be exercisable upon issuance and will have a term of 5.5 years from the date of issuance. The number of securities issued under the units is subject to adjustment as described in more detail in the Report on Form 6-K to be filed in connection with the private placement.

Maxim Group LLC is acting as the sole placement agent for the offering.

The securities described above were offered in a private placement exempt from the registration requirements under Section 4(a)(2) of the Securities Act of 1933, as amended (the “Act”) and Regulation D promulgated thereunder and in a transaction not involving a public offering and have not been registered under the Act or applicable state securities laws. Accordingly, the securities may not be reoffered or resold in the United States except pursuant to an effective registration statement or an applicable exemption from the registration requirements of the Securities Act and such applicable state securities laws.

This press release shall not constitute an offer to sell or a solicitation of an offer to buy any of the securities described herein, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of any such state or other jurisdiction.

About Tantech Holdings Ltd

For the past decade, Tantech has been a highly specialized high-tech enterprise producing, researching and developing bamboo charcoal-based products with an established domestic and international sales and distribution network. Since 2017, when the Company acquired 70% of Shangchi Automobile, a vehicle manufacturer based in Zhangjiagang City, Jiangsu Province, it has manufactured and sold vehicles. The Company established two new subsidiaries, Lishui Smart New Energy Automobile Co., Ltd. and Zhejiang Shangchi New Energy Automobile Co., Ltd., in November 2020, to produce and sell street sweepers and other electric vehicles. The Company is fully ISO 90000 and ISO 14000 certified and has received a number of national, provincial and local honors, awards and certifications for its products and scientific research efforts. The Company’s subsidiary, First International Commercial Factoring (Shenzhen) Co., LTD, is engaged in commercial factoring for businesses in and related to its supply chain. For more information, please visit: <https://tanhtech.com>.

Forward-Looking Statements

This news release contains forward-looking statements as defined by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements concerning the sales, plans, objectives, goals, strategies, future events or performance, and underlying assumptions and other statements that are other than statements of historical facts. These statements are subject to uncertainties and risks including, but not limited to, product and service demand and acceptance, changes in technology, economic conditions, the impact of competition and pricing, government regulations, and other risks contained in reports filed by the Company with the Securities and Exchange Commission.

All such forward-looking statements, whether written or oral, and whether made by or on behalf of the Company, are expressly qualified by this cautionary statement and any other cautionary statements which may accompany the forward-looking statements. In addition, the Company disclaims any obligation to update any forward-looking statements to reflect events or circumstances after the date hereof.

For more information, please contact:

Tantech Holdings Ltd
Investor Relations
Tel: +86 (578) 226-2305
ir@tantech.cn