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

SCHEDULE 13D
Under the Securities Exchange Act of 1934

(Amendment No.)*

Advanced Emissions Solutions, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share
(Title of Class of Securities)

00770C101
(CUSIP Number)

Jeremy Blank
c/o Community Fund
9800 Wilshire Blvd
Beverly Hills, CA 90212
(310) 430-7495

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

March 9, 2023
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1	NAMES OF REPORTING PERSONS Jeremy Blank	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3	SEC USE ONLY	
4	SOURCE OF FUNDS (SEE INSTRUCTIONS) OO	
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(D) OR 2(E) <input type="checkbox"/>	
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER 1,453,453 ⁽¹⁾
	8	SHARED VOTING POWER 0
	9	SOLE DISPOSITIVE POWER 1,453,453 ⁽¹⁾
	10	SHARED DISPOSITIVE POWER 0
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 1,453,453 ⁽¹⁾	
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 5.4% ⁽²⁾	
14	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN	

(1) Includes 325,457 shares of Common Stock (as defined herein) that the Reporting Person has the right to acquire upon exercise of Warrants (as defined herein) held directly by CF Global (as defined herein).

(2) Based on the sum of (i) 26,824,177 shares of Common Stock outstanding as of February 24, 2023, as reported in the Issuer's annual report on Form 10-K filed with the Securities and Exchange Commission (the "Commission") on March 8, 2023, plus (ii) 325,457 shares of Common Stock issuable upon exercise of Warrants held directly by CF Global, which amount has been added to the shares of Common Stock outstanding in accordance with Rule 13d-3(d)(i)(1) under the Act.

Item 1. Security and Issuer

This statement on Schedule 13D (this “**Statement**”) is filed with respect to the common stock, par value \$0.001 per share (“**Common Stock**”), of Advanced Emissions Solutions, Inc., a Delaware corporation (the “**Issuer**”). The address of the principal executive offices of the Issuer is 8051 E. Maplewood Avenue, Suite 210, Greenwood Village, Colorado 80111. Information given in response to each item shall be deemed incorporated by reference in all other items, as applicable.

Item 2. Identity and Background

- (a) This Statement is being filed on behalf of Jeremy Blank (the “**Reporting Person**”), who is a director of the Issuer.
- (b) The business address of the Reporting Person is c/o Community Fund, 9800 Wilshire Blvd, Beverly Hills, CA 90212.
- (c) The present principal occupation of the Reporting Person is manager to private investment vehicles.
- (d) The Reporting Person has not during the last five years been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) The Reporting Person has not during the last five years been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) The Reporting Person is a citizen of the United States.

Item 3. Source and Amount of Funds or Other Consideration

On February 1, 2023, the Issuer entered into a Securities Purchase Agreement (the “**Securities Purchase Agreement**”) with Arq Limited, a company incorporated under the laws of Jersey (“**Arq**”), pursuant to which the Issuer acquired all of the direct and indirect equity interests of Arq’s subsidiaries in exchange for consideration consisting of (i) 3,814,864 shares of Common Stock, and (ii) 5,294,462 shares of Series A Convertible Preferred Stock, par value \$0.001 per share (“**Preferred Stock**”), of the Issuer (together, the “**Transaction**”). Following the Transaction, Arq undertook a buyback of its own shares (the “**Buyback**”) as a means of distributing the Common Stock and Preferred Stock that were the proceeds of the sale. In the Buyback, participating Arq shareholders received in the aggregate 9.78 shares of Common Stock and 11.44 shares of Preferred Stock as consideration for every 1,000 ordinary shares in Arq (rounded down to the nearest whole share). Each of YGF 100 LP (“**YGF**”) and Community SPV GP LP (“**Community SPV**”), investment vehicles that the Reporting Person ultimately controls, was a shareholder of Arq and participated in the Buyback. Accordingly, in the Buyback, which was effective March 9, 2023, YGF received 630,619 shares of Common Stock and 737,657 shares of Preferred Stock. Community SPV received 19,804 shares of Common Stock and 23,166 shares of Preferred Stock, in exchange for their shares of Arq.

Also on February 1, 2023, the Issuer entered into Subscription Agreements (“**Subscription Agreements**”) with certain persons (the “**Subscribers**”), including YGF, pursuant to which the Subscribers subscribed for and purchased an aggregate 3,842,315 shares of Common Stock at a price per share of \$4.00 (the “**PIPE**”). In the PIPE, YGF purchased an aggregate 631,866 shares of Common Stock on behalf of itself and certain other Subscribers, using its working capital. On March 9, 2023, YGF distributed 154,293 shares of Common Stock to such Subscribers upon receipt of the \$4-per-share purchase price from such Subscribers.

On August 19, 2022, the Issuer and CF Global Credit, LP (“**CF Global**”), an investment vehicle that Reporting Person ultimately controls, executed a commitment letter pursuant to which CF Global offered to provide a \$10 million term loan (the “**Term Loan**”) to the Issuer. On February 1, 2023, the Issuer, as borrower, certain of its subsidiaries, as guarantors, and CF Global, as administrative agent and lender, entered into the Term Loan upon execution of a Term Loan and Security Agreement (the “**Loan Agreement**”). In connection with the Loan Agreement and as consideration for the Term Loan, on February 1, 2023, the Issuer issued to CF Global a warrant (the “**Warrant**”) to purchase 325,457 shares of Common Stock. The Warrant has an exercise price of \$0.01 per share, subject to adjustment as set forth in the Warrant, is exercisable immediately and will expire on February 1, 2030. The terms of the Warrant do not allow for cash exercise, and the Warrant may only be exercised pursuant to the terms thereof.

The foregoing description of each of the Subscription Agreements and the Loan Agreement does not purport to be complete and is subject to, and qualified in its entirety by, the full text of each of the form of Subscription Agreement and the Loan Agreement, each of which is attached as an exhibit to this Statement and is incorporated herein by reference.

Item 4. Purpose of Transaction

The information set forth in the response to Item 3 of this Statement is incorporated herein by reference.

The Reporting Person acquired and holds the securities of the Issuer reported herein for investment purposes, and such acquisitions were made in the Reporting Person’s ordinary course of business of managing the investment vehicles he ultimately controls.

On February 1, 2023, pursuant to the terms of the Securities Purchase Agreement, the Issuer expanded the size of its board of directors (the “**Board**”) from four to seven members and elected three directors of Arq, including the Reporting Person, to the newly created vacancies, effective immediately. The Reporting Person may receive compensation for his service as a non-management director on the Board, consistent with the compensation generally provided to other non-management directors, as determined by the Board.

As a director on the Board, and consistent with his investment intent, the Reporting Person may engage in communications with, without limitation, one or more shareholders of the Issuer, one or more officers of the Issuer and/or one or more members of the Board regarding the Issuer, including but not limited to its operations, governance and control.

The Reporting Person expects to review from time to time his investment in the Issuer and may, depending on the market and other conditions: (i) purchase additional securities in the open market, in privately negotiated transactions or otherwise; (ii) sell all or a portion of the securities now beneficially owned or hereafter acquired; or (iii) engage in other actions related to or that could result in any of the matters referred to in paragraphs (a) through (j), inclusive, of the instructions to Item 4 of Schedule 13D.

Except as set forth herein, the Reporting Person does not currently have any plans or proposals which relate to, or could result in, any of the matters referred to in paragraphs (a) through (j), inclusive, of the instructions to Item 4 of Schedule 13D. The Reporting Person may, at any time and from time to time, review or reconsider his position and/or change his purpose and/or formulate plans or proposals with respect thereto.

Item 5. Interest in Securities of the Issuer

(a, b) As of the date hereof, the Reporting Person may be deemed to beneficially own, in the aggregate, 1,453,453 shares of Common Stock, which represents approximately 5.4% of the shares of Common Stock outstanding. This amount includes: (i) 1,108,192 shares of Common Stock held directly by YGF; (ii) 19,804 shares of Common Stock held directly by Community SPV; and (iii) 325,457 shares of Common Stock issuable upon exercise of Warrants held directly by CF Global.

Each share of Preferred Stock will be automatically converted into a share of Common Stock upon approval by the holders of the percentage of Common Stock required to approve such conversion under the applicable rules of The Nasdaq Stock Market, without the need for any action on the part of the holders of the Preferred Stock (the “**Conversion Approval**”). Each share of Preferred Stock has an original issue price of \$4.00 per share (the “**Original Issue Amount**”). The number of shares of Common Stock issuable upon conversion of each share of Preferred Stock shall be equal to the product of (i) the sum of (A) the Original Issue Amount plus (B) an amount equal to the cumulative amount of the accrued and unpaid dividends on such share at such time (regardless of whether or not declared or funds for their payment are lawfully available) divided by (ii) the Original Issue Amount, subject to adjustment as provided in the Preferred Stock’s Certificate of Designations. Prior to the Conversion Approval, the Reporting Person does not have the right to convert the Preferred Stock into Common Stock. Accordingly, the shares of Common Stock issuable upon conversion of the shares of Preferred Stock held directly by YGF and Community SPV are excluded from the Reporting Person’s beneficial ownership as reported herein.

The foregoing beneficial ownership percentage is based on the sum of (i) 26,824,177 shares of Common Stock outstanding as of February 24, 2023, as reported in the Issuer's annual report on Form 10-K filed with the Commission on March 8, 2023, plus (ii) 325,457 shares of Common Stock issuable upon exercise of Warrants held directly by CF Global, which amount has been added to the shares of Common Stock outstanding in accordance with Rule 13d-3(d)(i)(1) under the Act.

(c) The information set forth in the response to Item 3 is incorporated by reference herein. Except as set forth in this Statement, no transactions in the shares of Common Stock have been effected by the Reporting Person within the past 60 days.

(d) Each of YGF, Community SPV and CF Global is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the securities covered by this Statement that may be deemed to be beneficially owned by the Reporting Person.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

The information set forth in the response to Item 3 of this Statement is incorporated herein by reference.

Pursuant to the terms of the Securities Purchase Agreement, Arq and the Subscribers, including YGF, entered into a Registration Rights Agreement (the "**Registration Rights Agreement**") with the Issuer on February 1, 2023. The Registration Rights Agreement provides that as promptly as practicable following the closing of the Transaction, but no later than 150 days after the consummation of the Transaction, the Issuer will file a registration statement registering the resale of the shares of Common Stock received by Arq and the Subscribers (including shares of Common Stock issuable upon conversion of the Preferred Stock). The Issuer will also use commercially reasonable efforts to have such registration statement declared effective as soon as practicable following the filing thereof. The Registration Rights Agreement further provides that certain of the investors party thereto will be entitled to customary "piggyback" registration rights.

The foregoing summary of the Registration Rights Agreement does not purport to be complete and is subject to, and qualified in its entirety by, the text of the Registration Rights Agreement, which is filed as an exhibit to this Statement and is incorporated herein by reference.

Except as otherwise set forth in this Schedule 13D, there are no contracts, arrangements, understandings or relationships between the Reporting Person and any other person with respect to any securities of the Issuer.

Item 7. Material to be Filed as Exhibits

- [Exhibit 1](#) Form of Subscription Agreement
 - Exhibit 2 [Loan Agreement](#), dated February 1, 2023, by and among the Issuer, certain subsidiaries of the Issuer, and CF Global (incorporated by reference to Exhibit 10.2 to the Issuer's Current Report on Form 8-K filed with the Commission on February 1, 2023).
 - Exhibit 3 [Registration Rights Agreement](#), dated February 1, 2023, by and among the Issuer, YGF, and other Subscribers (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed with the Commission on February 1, 2023).
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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: March 9, 2023

JEREMY BLANK

/s/ Jeremy Blank

Attention: Intentional misstatements or omissions of fact constitute federal violations (see 18 U.S.C. 1001).

**SUBSCRIPTION
AGREEMENT**

This SUBSCRIPTION AGREEMENT (this “Subscription Agreement”) is entered into this [•] day of January, 2023, by and among Advanced Emissions Solutions, Inc., a Delaware corporation (the “Issuer”), Elbert Holdings, Inc., a Delaware corporation (“Elbert”), solely as it relates to the recitals hereof, and the undersigned (“Subscriber”).

WHEREAS, the Subscriber previously entered into a Subscription Agreement with Elbert (the “Prior Subscription Agreement”) for the purchase of shares of Elbert’s common stock;

WHEREAS, the Subscriber and Elbert now acknowledge and agree that the obligation to purchase shares of Elbert’s common stock under the Prior Subscription Agreement and all other obligations of such parties under the Prior Subscription Agreement are hereby terminated and the Prior Subscription Agreement is of no further force and effect as of the date hereof;

WHEREAS, concurrent herewith, the Issuer is entering into that certain Securities Purchase Agreement, dated as of January [•], 2023 (as may be amended or supplemented from time to time, the “Purchase Agreement”), among the Issuer and Arq Limited, a company incorporated under the laws of Jersey (“Arq”), whereby, among other things, the Issuer will purchase the Purchased Interests from Arq and Arq will sell the Purchased Interests to the Issuer, on the terms and subject to the conditions set forth therein and in the ancillary agreements thereto (the “Transaction”) (capitalized terms used and not otherwise defined herein shall have the meanings given to them in the Purchase Agreement);

WHEREAS, in connection with and immediately following the Transaction, on the terms and subject to the conditions set forth in this Subscription Agreement, Subscriber desires to subscribe for and purchase from the Issuer the number of shares of the Issuer’s common stock, par value \$0.001 per share (the “Common Shares”), set forth on the signature page hereto (the “Acquired Shares”), at a per share purchase price equal to the Per Share Purchase Price (as defined below), and the Issuer desires to issue and sell to Subscriber the Acquired Shares in consideration of the payment of the Aggregate Subscription Amount set forth on the signature page hereto (the “Aggregate Purchase Price”) by or on behalf of Subscriber to the Issuer at the Closing (as defined herein);

WHEREAS, contemporaneously with the execution and delivery of this Subscription Agreement, the parties hereto are executing and delivering a registration rights agreement (the “Registration Rights Agreement”), under which the Issuer has agreed to provide certain registration rights with respect to the Common Shares and Acquired Shares under the Securities Act of 1933, as amended (the “Securities Act”) and the rules and regulations promulgated thereunder, and applicable state securities laws; and

WHEREAS, in connection with the Transaction, certain “accredited investors” (as such term is defined in Rule 501 under the Securities Act) or “qualified institutional buyers” (as defined in Rule 144A promulgated under the Securities Act) other than the Subscriber (each, an “Other Subscriber”), have entered into subscription agreements with the Issuer substantially similar to this Subscription Agreement, pursuant to which such Other Subscribers have agreed to subscribe for and purchase, and the Issuer has agreed to issue and sell to such Other Subscribers, on the Closing Date (as defined herein), Common Shares at the Per Share Purchase Price (the “Other Subscription Agreements”).

NOW, THEREFORE, in consideration of the foregoing and the mutual representations, warranties and covenants, and subject to the conditions, herein contained, and intending to be legally bound hereby, the parties hereto hereby agree as follows:

1. Subscription. Subject to the terms and conditions hereof, Subscriber hereby irrevocably subscribes for and agrees to purchase, and the Issuer hereby agrees to issue and sell to Subscriber, upon the payment of the Aggregate Purchase Price, the Acquired Shares (such subscription and issuance, the “Subscription”). Subscriber understands and agrees that the Issuer reserves the right to accept or reject the Subscriber’s subscription for the Acquired Shares for any reason or for no reason, in whole or in part, at any time prior to its acceptance by the Issuer, and the same shall be deemed to be accepted by the Issuer only when this Subscription Agreement is signed by a duly authorized person by or on behalf of the Issuer. In the event of rejection of the entire subscription by the Issuer, the Subscriber’s payment hereunder will be returned promptly (but not later than two (2) Business Days thereafter) to the Subscriber along with this Subscription Agreement, and this Subscription Agreement shall have no force or effect.

Notwithstanding anything herein to the contrary, the Issuer understands that although the Acquired Shares are being acquired by the Subscriber pursuant to this Agreement, the Subscriber may arrange for substituted purchasers (the “Substituted Purchasers”), for up to twenty (20) Business Days after Closing, who will be “accredited investors” (as defined above), for a portion of the Acquired Shares in connection with the private placement of the Acquired Shares in the United States only in accordance with the provisions of this Agreement and, without limiting the foregoing, only to Substitute Purchasers that satisfy the applicable requirements set forth on Schedule A to this Agreement. Each Substituted Purchaser may purchase Acquired Shares directly from the Subscriber at the Per Share Purchase Price set forth above.

2. Purchase Price. For purposes of this Subscription Agreement, the “Per Share Purchase Price” shall be equal to \$4.00.

3. Closing.

a. The closing of the Subscription contemplated hereby (the “Closing”) shall occur simultaneously with the execution and delivery of this Subscription Agreement by the Issuer and the Subscriber (such date, the “Closing Date”).

b. At the Closing:

(i) Subscriber shall deliver to the Issuer the Aggregate Purchase Price for the Acquired Shares by wire transfer of U.S. dollars in immediately available funds to the account specified by the Issuer in writing; and

(ii) The Issuer shall deliver to Subscriber the Acquired Shares against and upon payment by the Subscriber in book entry form, free and clear of any liens (other than those arising under state or federal securities laws), in the name of Subscriber (or its nominee in accordance with its delivery instructions) or to a custodian designated by Subscriber, as applicable. Each book entry for the Acquired Shares shall contain a legend in substantially the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES LAWS OF ANY STATE OR OTHER JURISDICTION, AND MAY NOT BE OFFERED, SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM. THE HOLDER WILL NOTIFY ANY SUBSEQUENT PURCHASER OF THIS SECURITY FROM IT OF THE RESALE RESTRICTIONS REFERRED TO ABOVE.

4. Issuer Representations and Warranties. The Issuer represents and warrants that:

a. The Issuer has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own, lease and operate its properties and conduct its business as presently conducted and to enter into, deliver and perform its obligations under this Subscription Agreement.

b. The Acquired Shares have been duly authorized and, when issued and delivered to Subscriber against full payment for the Acquired Shares in accordance with the terms of this Subscription Agreement, the Acquired Shares will be validly issued, fully paid and non-assessable and will not have been issued in violation of or subject to any preemptive or similar rights created under the Issuer's certificate of incorporation (as amended as of the Closing Date) and bylaws or under the laws of the State of Delaware.

c. This Subscription Agreement, the Other Subscription Agreements, the Purchase Agreement and the Registration Rights Agreement (collectively, the "Transaction Documents") have been duly authorized, executed and delivered by the Issuer and are enforceable against the Issuer in accordance with their respective terms, except as may be limited or otherwise affected by (i) bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other laws relating to or affecting the rights of creditors generally, and (ii) principles of equity, whether considered at law or equity.

d. Assuming the accuracy of Subscriber's representations and warranties in Section 5, the execution and delivery by the Issuer of the Transaction Documents, and the performance by the Issuer of its obligations under the Transaction Documents, including the issuance and sale of the Acquired Shares and the consummation of the other transactions contemplated herein, do not and will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any of the property or assets of the Issuer or its Subsidiaries (as defined below) pursuant to the terms of (i) any indenture, mortgage, deed of trust, loan agreement, lease, license or other agreement or instrument to which the Issuer is a party or by which the Issuer or its Subsidiaries is bound or to which any of the property or assets of the Issuer or its Subsidiaries is subject, which would have a material adverse effect on the business, properties, financial condition, stockholders' equity or results of operations of the Issuer and its Subsidiaries taken as a whole (a "Material Adverse Effect") or materially affect the validity of the Acquired Shares or the legal authority of the Issuer to comply in all material respects with the terms of this Subscription Agreement; (ii) the organizational documents of the Issuer; or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Issuer or its Subsidiaries or any of their respective properties, in the case of each of the foregoing clauses (i)-(iii) that would have a Material Adverse Effect or materially affect the validity of the Acquired Shares or the legal authority of the Issuer to comply in all material respects with this Subscription Agreement. For purposes of this Subscription Agreement, "Subsidiaries" shall have the meaning ascribed to such term in the Purchase Agreement.

e. There are no securities or instruments issued by or to which the Issuer is a party containing anti-dilution or similar provisions that will be triggered by the issuance of (i) the Acquired Shares or (ii) the Common Shares to be issued pursuant to any Other Subscription Agreement, in each case, that have not been or will not be validly waived on or prior to the Closing Date.

f. The Issuer is not in default or violation (and no event has occurred which, with notice or the lapse of time or both, would constitute a default or violation) of any term, condition or provision of (i) the organizational documents of the Issuer, (ii) any loan or credit agreement, note, bond, mortgage, indenture, lease or other agreement, permit, franchise or license to which the Issuer is now a party or by which the Issuer's properties or assets are bound, or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body, domestic or foreign, having jurisdiction over the Issuer or any of its properties, except, in the case of clauses (ii) and (iii), for defaults or violations that have not had and would not be reasonably likely to have, individually or in the aggregate, a Material Adverse Effect.

g. Assuming the accuracy of Subscriber's representations and warranties in Section 5, the Issuer is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority, self-regulatory organization or other person in connection with the execution, delivery and performance by the Issuer of this Subscription Agreement (including, without limitation, the issuance of the Acquired Shares), other than (i) filings required by applicable state or federal securities laws, (ii) the filings required in accordance with Section 7(m), (iii) those notices and filings required by the Nasdaq Global Market (the "Stock Exchange"), which notices and filings have been made prior to the execution of this Agreement, and (iv) the failure of which to obtain would not be reasonably likely to have, individually or in the aggregate, a Material Adverse Effect or have a material adverse effect on the Issuer's ability to consummate the transactions contemplated hereby, including the sale and issuance of the Acquired Shares.

h. As of the date hereof, upon the closing of the Transaction but prior to the closing of the Subscription and the transactions contemplated by the Other Subscription Agreements, (i) the authorized capital stock of the Issuer consists of (A) 50,000,000 shares of preferred stock and (B) 100,000,000 Common Shares and (ii) 5,294,462 shares of preferred stock are issued and outstanding and 27,603,183 Common Shares are issued (including 4,618,146.00 of which are held in ADES' treasury) and 22,985,037 Common Shares are outstanding.

i. The issued and outstanding Common Shares are registered pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and are listed for trading on the Stock Exchange. There is no suit, action, proceeding or investigation pending or, to the knowledge of the Issuer, threatened against the Issuer by the Stock Exchange or the U.S. Securities and Exchange Commission (the "Commission") with respect to any intention by such entity to deregister the Common Shares or prohibit or terminate the listing of the Common Shares on the Stock Exchange. The Issuer has taken no action that is designed to terminate the registration of the Common Shares under the Exchange Act.

j. Assuming the accuracy of Subscriber's representations and warranties set forth in Section 5, no registration under the Securities Act is required for the offer and sale of the Acquired Shares by the Issuer to Subscriber in the manner contemplated by this Subscription Agreement.

k. Neither the Issuer nor any person acting on its behalf has engaged or will engage in any form of general solicitation or general advertising (within the meaning of Regulation D of the Securities Act) in connection with any offer or sale of the Acquired Shares.

l. None of the forms, reports, statement, schedules, prospectuses, proxies, registration statements or other documents, if any, filed by the Issuer with the Commission since January 1, 2020 (the "SEC Documents") filed under the Exchange Act (except to the extent that information contained in any SEC Document has been superseded by a later timely filed SEC Document) contained, when filed or, if amended prior to the date of this Subscription Agreement, as of the date of such amendment with respect to those disclosures that are amended, any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, except that have not had and would not be reasonably likely to have, individually or in the aggregate, a Material Adverse Effect. As of the date hereof, there are no material outstanding or unresolved comments in comment letters from the Staff of the Commission with respect to any of the SEC Documents.

m. Except for such matters as have not had and would not be reasonably likely to have, individually or in the aggregate, a Material Adverse Effect, as of the date hereof, there is no (i) suit, action, proceeding or arbitration before a governmental authority or arbitrator pending, or, to the knowledge of the Issuer or its Subsidiaries, threatened against the Issuer or its Subsidiaries, (ii) judgment, decree, injunction, ruling or order of any governmental entity or arbitrator outstanding against the Issuer or its Subsidiaries or that has the effect of making consummation of the Subscription illegal or otherwise preventing or prohibiting consummation of the Subscription or (iii) governmental authority that shall have instituted or threatened in writing a proceeding seeking to impose any such prevention or prohibition.

n. None of the Issuer, its Subsidiaries, 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 Acquired Shares under the Securities Act, whether through integration with prior offerings pursuant to Rule 502(a) of the Securities Act or otherwise.

5. Subscriber Representations and Warranties. Subscriber represents and warrants that:

a. If Subscriber is an entity, Subscriber has been duly formed or incorporated and is validly existing in good standing under the laws of its jurisdiction of incorporation or formation, with the requisite entity power and authority to enter into, deliver and perform its obligations under this Subscription Agreement.

b. This Subscription Agreement has been duly authorized, executed and delivered by Subscriber. This Subscription Agreement is enforceable against Subscriber in accordance with its terms, except as may be limited or otherwise affected by (i) bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium or other laws relating to or affecting the rights of creditors generally, and (ii) principles of equity, whether considered at law or equity.

c. The execution and delivery by Subscriber of this Subscription Agreement, and the performance by Subscriber of its obligations under this Subscription Agreement, including the purchase of the Acquired Shares and the consummation of the other transactions contemplated herein, will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any of the property or assets of Subscriber pursuant to the terms of (i) any indenture, mortgage, deed of trust, loan agreement, lease, license or other agreement or instrument to which Subscriber is a party or by which Subscriber is bound or to which any of the property or assets of Subscriber is subject, which would be reasonably likely to have a material adverse effect on the business, properties, financial condition, stockholders' equity or results of operations of Subscriber, taken as a whole (a "Subscriber Material Adverse Effect"), or materially affect the legal authority of Subscriber to comply in all material respects with the terms of this Subscription Agreement; (ii) the organizational documents of Subscriber; or (iii) any statute or any judgment, order, rule or regulation of any court or governmental agency or body, domestic or foreign, having jurisdiction over Subscriber or any of Subscriber's properties that would be reasonably likely to have a Subscriber Material Adverse Effect or materially affect the legal authority of Subscriber to comply in all material respects with this Subscription Agreement.

d. Subscriber (i) is a “qualified institutional buyer” (as defined in Rule 144A promulgated under the Securities Act) or an “accredited investor” (within the meaning of Rule 501(a) under the Securities Act), in each case, satisfying the applicable requirements set forth on Schedule A, (ii) is acquiring the Acquired Shares only for its own account and not for the account of others, or if Subscriber is subscribing for the Acquired Shares as a fiduciary or agent for one or more investor accounts, each owner of such account is an “accredited investor” (as defined above) and Subscriber has full investment discretion with respect to each such account, and the full power and authority to make the acknowledgements, representations and agreements herein on behalf of each owner of each such account, and (iii) is not acquiring the Acquired Shares with a view to, or for offer or sale in connection with, any distribution thereof in violation of the Securities Act or any other securities laws of the United States or any other jurisdiction. Subscriber has completed Schedule A following the signature page hereto and the information contained therein is accurate and complete.

e. Subscriber understands that the Acquired Shares are being offered in a transaction not involving any public offering within the meaning of the Securities Act and that the Acquired Shares have not been registered under the Securities Act or any other securities laws of the United States or any other jurisdiction. Subscriber acknowledges that it is acquiring its entire beneficial ownership interest in the Acquired Shares for Subscriber’s own account and not with a view to any distribution of the Acquired Shares in any manner that would violate the securities laws of the United States or any other jurisdiction. Subscriber understands that the Acquired Shares may not be resold, Transferred (as defined herein), pledged or otherwise disposed of by Subscriber absent an effective registration statement under the Securities Act, except (i) to the Issuer or a subsidiary thereof, (ii) to non-U.S. persons pursuant to offers and sales that occur outside the United States within the meaning of Regulation S under the Securities Act, (iii) pursuant to Rule 144 promulgated under the Securities Act, absent a change in law, receipt of regulatory no-action relief or an exemption, provided that all of the applicable conditions thereof have been met, or (iv) pursuant to another applicable exemption from the registration requirements of the Securities Act (including without limitation sales conducted pursuant to Rule 144 promulgated under the Securities Act), and that any certificates or book entry records representing the Acquired Shares shall contain a legend to such effect. Subscriber acknowledges that the Acquired Shares will not immediately be eligible for resale pursuant to Rule 144 promulgated under the Securities Act. Subscriber understands and agrees that the Acquired Shares will be subject to transfer restrictions and, as a result of these transfer restrictions, Subscriber may not be able to readily resell the Acquired Shares and may be required to bear the financial risk of an investment in the Acquired Shares for an indefinite period of time. Subscriber understands that it has been advised to consult legal counsel prior to making any offer, resale, pledge or Transfer of any of the Acquired Shares. For purposes of this Subscription Agreement, “Transfer” shall mean any direct or indirect transfer, redemption, disposition or monetization in any manner whatsoever, including, without limitation, through any derivative transactions.

f. Subscriber understands and agrees that Subscriber is purchasing the Acquired Shares directly from the Issuer. Subscriber further acknowledges that there have been no representations, warranties, covenants and agreements made to Subscriber by the Issuer or any of its respective affiliates, or any of their respective subsidiaries, control persons, officers, directors, employees, partners, agents or representatives or any other person or entity, expressly or by implication, other than those representations, warranties, covenants and agreements of the Issuer included in this Subscription Agreement.

g. Subscriber's acquisition and holding of the Acquired Shares will not constitute or result in a non-exempt prohibited transaction under section 406 of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), section 4975 of the Internal Revenue Code of 1986, as amended (the "Code"), or any applicable similar law.

h. In making its decision to subscribe for and purchase the Acquired Shares, Subscriber represents that it has relied solely upon its own independent investigation. Without limiting the generality of the foregoing, Subscriber has not relied on any statements or other information provided by the Issuer or any of its respective affiliates, or any of their respective control persons, officers, directors, employees, partners, agents or representatives, concerning the Issuer or the Acquired Shares or the offer and sale of the Acquired Shares or Subscriber's decision to purchase the Acquired Shares. Subscriber acknowledges and agrees that Subscriber has received such information as Subscriber deems necessary in order to make an investment decision with respect to the Acquired Shares, including with respect to the Issuer and the Transaction. Subscriber represents and agrees that Subscriber and Subscriber's professional advisor(s), if any, have had the full opportunity to ask such questions, receive such answers and obtain such information as Subscriber and such Subscriber's professional advisor(s), if any, have deemed necessary to make an investment decision with respect to the Acquired Shares.

i. Subscriber became aware of this offering of the Acquired Shares solely by means of direct contact between Subscriber and the Issuer, and the Acquired Shares were offered to Subscriber solely by direct contact between Subscriber and the Issuer. Subscriber did not become aware of this offering of the Acquired Shares, nor were the Acquired Shares offered to Subscriber, by any other means. Subscriber acknowledges that the Issuer represents and warrants that the Acquired Shares (i) were not offered by any form of general solicitation or general advertising and (ii) are not being offered in a manner involving a public offering under, or in a distribution in violation of, the Securities Act, or any state securities laws.

j. Subscriber acknowledges that it is aware that there are substantial risks incident to the purchase and ownership of the Acquired Shares. Subscriber qualifies as a sophisticated investor and has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of an investment, both in general and with regard to transactions in, and investment strategies involving, securities, including Subscriber's investment in the Acquired Shares, and Subscriber has sought such accounting, legal and tax advice as Subscriber has considered necessary to make an informed investment decision.

k. Alone, or together with any professional advisor(s), Subscriber represents and acknowledges that Subscriber has adequately analyzed and fully considered the risks of an investment in the Acquired Shares and determined that the Acquired Shares are a suitable investment for Subscriber and that Subscriber is able at this time and in the foreseeable future to bear the economic risk of a total loss of Subscriber's investment in the Issuer. Subscriber acknowledges specifically that a possibility of total loss exists.

l. Subscriber understands and agrees that no federal or state agency has passed upon or endorsed the merits of the offering of the Acquired Shares or made any findings or determination as to the fairness of an investment in the Acquired Shares.

m. Neither the due diligence investigation conducted by Subscriber in connection with making its decision to acquire the Acquired Shares nor any representations and warranties made by Subscriber herein shall modify, amend or affect Subscriber's right to rely on the truth, accuracy and completeness of Issuer's representations and warranties contained herein.

n. Neither Subscriber nor any of its officers, directors, managers, managing members, general partners or any other person acting in a similar capacity or carrying out a similar function is (i) a person or entity named on the List of Specially Designated Nationals and Blocked Persons, the Executive Order 13599 List, the Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, the Russia Related Sanctions Programs each of which is administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC") (collectively "OFAC Lists"), (ii) owned or controlled by, or acting on behalf of, a person, that is named on an OFAC List, (iii) organized, incorporated, established, located, resident or born in, or a citizen, national, or the government, including any political subdivision, agency, or instrumentality thereof, of, Cuba, Iran, North Korea, Syria, or the covered regions of Ukraine, including Crimea, the Donetsk People's Republic, and the Luhansk People's Republic, or any other country or territory embargoed or subject to comprehensive trade restrictions by the United States, the United Kingdom, the European Union or any European Union individual member state, (iv) a Designated National as defined in the Cuban Assets Control Regulations, 31 C.F.R. Part 515 or (v) a non-U.S. shell bank or providing banking services indirectly to a non-U.S. shell bank. Subscriber represents that if it is a financial institution subject to the Bank Secrecy Act (31 U.S.C. section 5311 et seq.) (the "BSA"), as amended by the USA PATRIOT Act of 2001 (the "PATRIOT Act"), and its implementing regulations (collectively, the "BSA/PATRIOT Act"), that Subscriber maintains policies and procedures reasonably designed to comply with applicable obligations under the BSA/PATRIOT Act. Subscriber also represents that it maintains policies and procedures reasonably designed to ensure compliance with OFAC-administered sanctions programs, including for the screening of its investors against the OFAC Lists. Subscriber further represents and warrants that it maintains policies and procedures reasonably designed to ensure that the funds held by Subscriber and used to purchase the Acquired Shares were legally derived. Subscriber agrees to provide law enforcement agencies, if requested thereby, such records as required by applicable law, provided that Subscriber is permitted to do so under applicable law.

o. If Subscriber is or is acting on behalf of (i) an employee benefit plan that is subject to Title I of ERISA, (ii) a plan, an individual retirement account or other arrangement that is subject to section 4975 of the Code, (iii) an entity whose underlying assets are considered to include “plan assets” of any such plan, account or arrangement described in clauses (i) and (ii) (each, an “ERISA Plan”), or (iv) an employee benefit plan that is a governmental plan (as defined in section 3(32) of ERISA), a church plan (as defined in section 3(33) of ERISA), a non-U.S. plan (as described in section 4(b)(4) of ERISA) or other plan that is not subject to the foregoing clauses (i), (ii) or (iii) but may be subject to provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, “Similar Laws,” and together with the ERISA Plans, the “Plans”), then Subscriber represents and warrants that (1) neither the Issuer, nor any of its respective affiliates (the “Transaction Parties”) has provided investment advice or has otherwise acted as the Plan’s fiduciary with respect to its decision to acquire and hold the Acquired Shares, and none of the Transaction Parties is or shall at any time be the Plan’s fiduciary with respect to any decision to acquire and hold the Acquired Shares, and none of the Transaction Parties is or shall at any time be the Plan’s fiduciary with respect to any decision in connection with Subscriber’s investment in the Acquired Shares, and (2) its purchase of the Acquired Shares will not result in a non-exempt prohibited transaction under section 406 of ERISA or section 4975 of the Code, or any applicable Similar Law.

p. Subscriber has sufficient funds to pay the Aggregate Purchase Price pursuant to Section 3(b)(i).

6. Additional Agreements.

a. Subscriber hereby represents, warrants, covenants and agrees that, prior to the Closing Date, neither Subscriber nor any person or entity acting on behalf of Subscriber or pursuant to any understanding with Subscriber has or will engage in any Short Sales with respect to securities of the Issuer. For purposes of this Section 6, “Short Sales” shall include, without limitation, all “short sales” as defined in Rule 200 promulgated under Regulation SHO under the Exchange Act, and all types of direct and indirect stock pledges (other than pledges in the ordinary course of business as part of prime brokerage arrangements), forward sale contracts, options, puts, calls, swaps and similar arrangements (including on a total return basis), and sales and other transactions through non-U.S. broker dealers or foreign regulated brokers. The Issuer acknowledges and agrees that, notwithstanding anything herein to the contrary, the Acquired Shares may be pledged by Subscriber in connection with a bona fide margin agreement, provided such pledge shall be (i) pursuant to an available exemption from the registration requirements of the Securities Act or (ii) pursuant to, and in accordance with, a registration statement that is effective under the Securities Act at the time of such pledge, and Subscriber effecting a pledge of Acquired Shares shall not be required to provide the Issuer with any notice thereof; provided, however, that neither the Issuer nor their counsel shall be required to take any action (or refrain from taking any action) in connection with any such pledge, other than providing any such lender of such margin agreement with an acknowledgment that the Acquired Shares are not subject to any contractual prohibition on pledging or lock up, the form of such acknowledgment to be subject to review and comment by the Issuer in all respects.

b. The Issuer has not, and shall not, enter into any side letter or similar agreement with any Other Subscriber or any other investor in connection with such Other Subscriber’s or such other investor’s direct or indirect investment in the Issuer other than (i) the Purchase Agreement, and (ii) the Other Subscription Agreements. True and complete copies of the Other Subscription Agreements have been provided to the Subscriber. No Other Subscription Agreement included a purchase price per share that is lower than the Per Share Purchase Price or otherwise contains terms that are more favorable in any material respect to the subscriber thereunder than the terms of this Subscription Agreement are to the Subscriber. The Issuer shall not amend, modify or otherwise supplement any Other Subscription Agreements in any material respect following the date of this Subscription Agreement.

7. Miscellaneous.

- a. Each of the Issuer and Subscriber is entitled to rely upon this Subscription Agreement and is irrevocably authorized to produce this Subscription Agreement or a copy hereof to any interested party in any administrative or legal proceeding or official inquiry with respect to the matters covered hereby to the extent required by law or by regulatory bodies.
- b. Neither this Subscription Agreement nor any rights that may accrue to Subscriber hereunder (other than the Acquired Shares, if any) may be transferred or assigned.
- c. All the agreements, representations and warranties made by each party hereto in this Subscription Agreement shall survive the Closing.
- d. The Issuer may request from Subscriber such additional information as the Issuer may reasonably deem necessary to evaluate the eligibility of Subscriber to acquire the Acquired Shares, and Subscriber shall provide such information as may be reasonably requested, to the extent readily available and to the extent consistent with its internal policies and procedures; provided, that the Issuer agrees to keep any such information provided by Subscriber confidential.
- e. This Subscription Agreement constitutes the entire agreement, and supersedes all other prior agreements, understandings, representations and warranties, both written and oral, among the parties, with respect to the subject matter hereof.

f. Except as otherwise provided herein, this Subscription Agreement shall be binding upon, and inure to the benefit of the parties hereto and their heirs, executors, administrators, successors, legal representatives, and permitted assigns, and the agreements, representations, warranties, covenants and acknowledgments contained herein shall be deemed to be made by, and be binding upon, such heirs, executors, administrators, successors, legal representatives and permitted assigns.

g. Any term or provision of this Subscription Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions of this Subscription Agreement or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If a final judgment of a court of competent jurisdiction declares that any term or provision of this Subscription Agreement is invalid or unenforceable, the parties hereto agree that the court making such determination shall have the power to limit such term or provision, to delete specific words or phrases or to replace such term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Subscription Agreement shall be valid and enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term or provision.

h. This Subscription Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute one and the same instrument. The exchange of a fully executed Subscription Agreement (in counterparts or otherwise) by all parties hereto by electronic transmission in .PDF format shall be sufficient to bind the parties to the terms and conditions of this Subscription Agreement.

i. Each party shall pay all of its own expenses in connection with this Subscription Agreement and the transactions contemplated herein.

j. Any notice or communication required or permitted hereunder shall be in writing and either delivered personally, emailed, sent by overnight mail via a reputable overnight carrier, or sent by certified or registered mail, postage prepaid, and shall be deemed to be given and received (i) when so delivered personally, (ii) when sent, with no mail undeliverable or other rejection notice, if sent by email, or (iii) five (5) Business Days after the date of mailing to the address below or to such other address or addresses as such person may hereafter designate by notice given hereunder:

(i) if to Subscriber, to such address or addresses set forth on the signature page hereto;

(ii) if to the Issuer, to:

Advanced Emissions Solutions, Inc.
8051 E. Maplewood Avenue, Suite 210
Greenwood Village, CO 80111
USA
Attn: Mr. Clay Smith
Email: Clay.Smith@ada-cs.com

with a required copy to (which copy shall not constitute notice):

Gibson, Dunn & Crutcher LLP
2001 Ross Avenue, Suite 2100
Dallas, TX 75201
USA
Attn: Jonathan M. Whalen
Email: JWhalen@gibsondunn.com

k. This Subscription Agreement shall be governed by, and construed in accordance with, the Laws of the State of Delaware, regardless of the Laws that might otherwise govern under applicable principles of conflicts of laws. In any action or proceeding between any of the parties arising out of or relating to this Subscription Agreement or any of the transaction contemplated herein, each of the parties: (a) irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the Court of Chancery of the State of Delaware or, to the extent such court does not have subject matter jurisdiction, the United States District Court for the District of Delaware; (b) agrees that all claims in respect of such action or proceeding shall be heard and determined exclusively in accordance with clause (a) of this Section 7(k); (c) waives any objection to laying venue in any such action or proceeding in such courts; (d) waives any objection that such courts are an inconvenient forum or do not have jurisdiction over any party; and (e) agrees that service of process upon such party in any such action or proceeding shall be effective if notice is given in accordance with Section 7(j) of this Subscription Agreement.

l. EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS SUBSCRIPTION AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES AND, THEREFORE, EACH SUCH PARTY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LEGAL ACTION ARISING OUT OF OR RELATING TO THIS SUBSCRIPTION AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY. EACH PARTY TO THIS SUBSCRIPTION AGREEMENT CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT SEEK TO ENFORCE THE FOREGOING WAIVER IN THE EVENT OF A LEGAL ACTION, (B) SUCH PARTY HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (C) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (D) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS SUBSCRIPTION AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 7(L).

m. Notwithstanding anything in this Subscription Agreement to the contrary, the Issuer shall not publicly disclose the name of Subscriber or any of its affiliates, or include the name of Subscriber or any of its affiliates in any press release or in any filing with the Commission or any regulatory agency or trading market, without the prior written consent of Subscriber, except (i) as required by the federal securities law (including any required beneficial ownership disclosure in any filing made by the Issuer with the Commission), (ii) in the filing of the form of this Subscription Agreement with the Commission and in the related Current Report on Form 8-K in a manner acceptable to the undersigned, (iii) in a press release or marketing materials of the Issuer in connection with the Transaction in a manner reasonably acceptable to Subscriber and (iv) to the extent such disclosure is required by law, at the request of the Staff of the Commission or regulatory agency or under the regulations of the Stock Exchange, in which case the Issuer shall provide Subscriber with prior written notice of such disclosure permitted under this subclause (iv).

n. This Subscription Agreement may not be amended, modified, supplemented or waived except by an instrument in writing, signed by each of the parties hereto.

o. The parties agree that irreparable damage would occur if any provision of this Subscription Agreement were not performed in accordance with the terms hereof or were otherwise breached, and accordingly, that the parties hereto shall be entitled to an injunction or injunctions to prevent breaches of this Subscription Agreement, without posting a bond or undertaking and without proof of damages, or to enforce specifically the performance of the terms and provisions of this Subscription Agreement in an appropriate court of competent jurisdiction as set forth in Section 7(l), in addition to any other remedy to which any party is entitled at law, in equity, in contract, in tort or otherwise.

[Signature pages follow.]

IN WITNESS WHEREOF, the Issuer has executed or caused this Subscription Agreement to be executed by its duly authorized representative as of the date first written above.

ADVANCED EMISSIONS SOLUTIONS, INC.

By: _____
Name:
Title:

IN WITNESS WHEREOF, and solely as it relates to the recitals of this Subscription Agreement, the undersigned has executed or caused this Subscription Agreement to be executed by its duly authorized representative as of the date first written above.

ELBERT HOLDINGS, INC.

By:

Name:

Title:

IN WITNESS WHEREOF, the Subscriber has executed or caused this Subscription Agreement to be executed by its duly authorized representative as of the date set forth below.

Name of Subscriber:

State/Country of Formation or Domicile:

By: _____

Name: _____

Title: _____

Name in which Shares are to be registered (if different):

Date: _____, 2023

Subscriber EIN:

Business Address-Street:

Mailing Address-Street (if different):

City, State, Zip:

City, State, Zip:

Attn: _____

Attn: _____

Telephone No.:

Telephone No.:

Facsimile No.:

Facsimile No.:

Number of Common Shares subscribed for:
[●]

Aggregate Subscription Amount: \$

You must pay the Aggregate Subscription Amount by wire transfer of United States dollars in immediately available funds to the account previously specified by the Issuer in writing.

SCHEDULE A
ELIGIBILITY REPRESENTATIONS OF SUBSCRIBER

This Schedule must be completed by Subscriber and forms a part of the Subscription Agreement to which it is attached. Capitalized terms used and not otherwise defined in this Schedule have the meanings given to them in the Subscription Agreement. Subscriber must check the applicable box in either Part A or Part B below and the applicable box in Part C below.

A. QUALIFIED INSTITUTIONAL BUYER STATUS (Please check the applicable subparagraphs):

- Subscriber is a “qualified institutional buyer” (as defined in Rule 144A under the Securities Act (a “QIB”).
- Subscriber is subscribing for the Acquired Shares as a fiduciary or agent for one or more investor accounts, and each owner of such accounts is a QIB.

*** OR ***

B. ACCREDITED INVESTOR STATUS (Please check the applicable subparagraphs):

Subscriber is an “accredited investor” (within the meaning of Rule 501(a) under the Securities Act) and has checked below the box(es) for the applicable provision under which Subscriber qualifies as such:

- Subscriber is an organization described in Section 501(c)(3) of the Internal Revenue Code of 1986, as amended, corporation, Massachusetts or similar business trust, limited liability company or partnership not formed for the specific purpose of acquiring the securities of the Issuer being offered in this offering, with total assets in excess of \$5,000,000.
- Subscriber is a director or executive officer of the Issuer.
- Subscriber is a “private business development company” as defined in Section 202(a)(22) of the Investment Advisers Act of 1940.
- Subscriber is a “bank” as defined in Section 3(a)(2) of the Securities Act.
- Subscriber is a “savings and loan association” or other institution as defined in Section 3(a)(5)(A) of the Securities Act, whether acting in its individual or fiduciary capacity.
- Subscriber is an investment advisor registered pursuant to Section 203 of the Investment Advisers Act of 1940 or registered pursuant to the laws of a state.

- Subscriber is an investment adviser relying on the exemption from registering with the Commission under Section 203(l) or (m) of the Investment Advisers Act of 1940.
- Subscriber is a broker or dealer registered pursuant to Section 15 of the Exchange Act.
- Subscriber is an “insurance company” as defined in Section 2(a)(13) of the Securities Act.
- Subscriber is an investment company registered under the Investment Company Act of 1940.
- Subscriber is a “business development company” as defined in Section 2(a)(48) of the Investment Company Act of 1940.
- Subscriber is a “Small Business Investment Company” licensed by the U.S. Small Business Administration under either Section 301(e) or (d) of the Small Business Investment Act of 1958.
- Subscriber is a Rural Business Investment Company as defined in Section 384A of the Consolidated Farm and Rural Development Act.
- Subscriber is a plan established and maintained by a state, its political subdivisions, or any agency or instrumentality of a state or its political subdivisions, for the benefit of its employees, and such plan has total assets in excess of \$5,000,000.
- Subscriber is an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974 if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of such act, which is one of the following.
 - A bank;
 - A savings and loan association;
 - A insurance company; or
 - A registered investment adviser.
- Subscriber is an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974 with total assets in excess of \$5,000,000.
- Subscriber is an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974 that is a self-directed plan with investment decisions made solely by persons that are accredited investors.

- Subscriber is a trust with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the securities offered by the Issuer in this offering, whose purchase is directed by a sophisticated person as described in Rule 506(b)(2)(ii) under the Securities Act.
- Subscriber is a natural person whose individual net worth, or joint net worth with that person's spouse or spousal equivalent, exceeds \$1,000,000. For the purposes of calculating joint net worth, joint net worth can be the aggregate net worth of the investor and spouse or spousal equivalent; assets need not be held jointly to be included in the calculation.
- Subscriber is a natural person who had an individual income in excess of \$200,000 in each of the two most recent years or joint income with that person's spouse or spousal equivalent in excess of \$300,000 in each of those years and has a reasonable expectation of reaching the same income level in the current year.
- Subscriber is an entity in which all of the equity owners meet the requirements for accredited investor status.
- Subscriber is an entity not already considered an accredited investor under the definition, not formed for the specific purpose of acquiring the securities offered, owning investments in excess of U.S. \$5,000,000.
- Subscriber is a natural person holding in good standing one or more professional certifications or designations or credentials from an accredited educational institution that the Commission has designated as qualifying an individual for accredited investor status.
- Subscriber is a natural person holding any of the following FINRA certifications in good standing: Licensed General Securities Representative license (Series 7), Licensed Investment Adviser Representative (Series 65); or Licensed Private Securities Offerings Representative license (Series 82).
- Subscriber is a natural person who is a "knowledgeable employee," as defined in rule 3c5(a)(4) under the Investment Company Act of 1940, of the Issuer of the securities being offered or sold where the Issuer would be an investment company, as defined in section 3 of such act, but for the exclusion provided by either section 3(c)(1) or section 3(c)(7) of such act.
- Subscriber is a "family office," as defined in rule 202(a)(11)(G)-1 under the Investment Advisers Act of 1940 that was not formed for the specific purpose of acquiring the securities of the Issuer being offered in this offering, with total assets in excess of \$5,000,000 and whose prospective investment is directed by a person who has such knowledge and experience in financial and business matters that such family office is capable of evaluating the merits and risks of the prospective investment.

- Subscriber is a “family client,” as defined in Rule 202(a)(11)(G)-1 under the Investment Advisers Act of 1940 (17 CFR 275.202(a)(11)(G)-1), of a family office meeting the requirements in paragraph (a)(12) of this section and whose prospective investment in the issuer is directed by such family office pursuant to paragraph (a)(12)(iii).

*** AND ***

- C. AFFILIATE STATUS
(Please check the applicable box)

SUBSCRIBER:

- is:
 is not:

an “affiliate” (as defined in Rule 144 under the Securities Act) of the Issuer or acting on behalf of an affiliate of the Issuer.