

U.S. SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): July 14, 2023

ADVANCED EMISSIONS SOLUTIONS, INC.

(Name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)	001-37822 (Commission File Number)	27-5472457 (I.R.S. Employer Identification Number)
8051 E. Maplewood Avenue, Suite 210, Greenwood Village, CO (Address of principal executive offices)		80111 (Zip Code)

Registrant's telephone number, including area code: **(720) 598-3500**

Not Applicable

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Class	Trading Symbol	Name of each exchange on which registered
Common stock, par value \$0.001 per share	ADES	Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 3.02 Unregistered Sale of Equity Securities.

On July 17, 2023, Advanced Emissions Solutions, Inc. (the "Company") entered into a Subscription Agreement (the "Subscription Agreement") with Mr. Robert "Bob" Rasmus and entities controlled by Mr. Rasmus, in connection with his appointment as the Company's President and Chief Executive Officer, as described below under Item 5.02 in this Current Report on Form 8-K. Pursuant to the Subscription Agreement, Mr. Rasmus subscribed for and agreed to purchase 950,000 shares of the Company's common stock, par value \$0.001 per share, from the Company for an aggregate purchase price of \$1,800,000 (at a price per share of approximately \$1.90). The purchase of the securities is expected to close on or prior to the 30th day following the date of the Subscription Agreement. The securities to be issued to Mr. Rasmus under the Subscription Agreement will be issued in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended. The Company is relying on this exemption from registration based in part on representations made by Mr. Rasmus under the Subscription Agreement.

The sale of the securities pursuant to the Subscription Agreement has not been registered under the Securities Act or any state securities laws. The securities may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Neither this Current Report on Form 8-K, nor the exhibits attached hereto, is an offer to sell or the solicitation of an offer to buy the securities described herein.

The foregoing summary of the Subscription Agreement does not purport to be a complete description of the Subscription Agreement and is qualified in its entirety by reference to the full text of the Subscription Agreement, a copy of which is attached hereto as Exhibit 10.1 and incorporated herein by reference.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On July 14, 2023, the Company's Board of Directors (the "Board") appointed Mr. Rasmus to succeed Greg Marken as the Company's President and Chief Executive Officer effective July 17, 2023 (the "Effective Date"). The Board also increased the size of the Board to eight directors and appointed Mr. Rasmus to fill the vacancy as a Board member, effective as of the Effective Date. A press release, dated July 17, 2023, announcing this Chief Executive Officer transition is attached hereto as Exhibit 99.1.

Mr. Marken will remain as an employee of the Company until his employment with the Company terminates on August 28, 2023. It is expected that Mr. Marken will enter into a separation agreement, all of the material terms of which have not yet been finalized as of the date of this Current Report on Form 8-K and will be disclosed once finalized in accordance with SEC requirements.

Prior to the Effective Date, between 2012 and 2020, Mr. Rasmus, age 66, served as the Chief Executive Officer and a director of Hi-Crush, Inc., a fully integrated provider of proppant and logistics services for hydraulic fracturing operations that Mr. Rasmus founded in 2012. Prior to founding Hi-Crush, Mr. Rasmus was the Co-Founder and Managing Partner of Red Oak Capital Management, and was President of Thunderbolt Capital Corp., a venture firm focused on start-up and early-stage private equity investments. He also previously served as a Senior Managing Director of Banc One Capital Markets, Inc. and a Managing Director and Head of Investment Banking in London for First Chicago Ltd. Mr. Rasmus holds a B.A. degree in Government and International Relations from the University of Notre Dame.

In connection with his appointment, the Company and Mr. Rasmus entered into an employment agreement (the "Employment Agreement"). The Employment Agreement provides for (i) a base salary of \$50,000, (ii) a target annual bonus of 100% of base salary and a maximum annual bonus of 200% of base salary, (iii) a target annual long-term incentive compensation awards of 75% of base salary, (iv) a sign-on bonus of \$125,000, subject to repayment in the event of a termination for Cause or resignation without Good Reason (each as defined in the Employment Agreement) within one year of the Effective Date, and (v) reimbursement of up to \$20,000 of legal fees and expenses incurred by Mr. Rasmus in connection with the Employment Agreement. In addition, the Employment Agreement provides for the following employment inducement awards granted in accordance with Nasdaq Listing Rule 5635(c)(4): (a) an option to purchase 1,000,000 shares of the Company's common stock at an exercise price of \$3.00 (or, if greater, the fair market value per share on the grant date), which vests ratably in three equal annual installments and (b) 400,000 restricted stock units ("RSUs"), which vests as to 250,000 RSUs when the volume weighted average price ("VWAP") of the Company's common stock over a 30-day period equals \$10.00 per share and as to 150,000 RSUs when the VWAP over a 30-day period equals \$15.00 per share, in each case, prior to the third anniversary of the Effective Date.

In the event Mr. Rasmus is terminated without Cause or resigns for Good Reason, the Employment Agreement provides for the following severance benefits, subject to his execution of a release of claims: (i) a lump sum payment equal to his base salary plus his target annual bonus and (ii) accelerated vesting of the inducement option award. In addition, the inducement RSU award agreement provides for accelerated vesting if such termination without Cause or resignation for Good Reason occurs more than 18 months but less than three years following the Effective Date. The Employment Agreement also includes standard confidentiality, inventions assignment, non-competition, and customer and employee non-solicitation.

The foregoing summary of the Employment Agreement does not purport to be a complete description of the Employment Agreement and is qualified in its entirety by reference to the full text of the Employment Agreement, a copy of which is attached hereto as Exhibit 10.2 and incorporated herein by reference.

In addition, as described under Item 3.02 above, which is incorporated herein by reference, the Company entered into a Subscription Agreement with Mr. Rasmus, pursuant to which he agreed to purchase 950,000 shares of the Company's common stock, par value \$0.001 per share, from the Company for an aggregate purchase price of \$1,800,000 (at a price per share of approximately \$1.90).

Other than as described herein, Mr. Rasmus has no direct or indirect material interest in any other transaction required to be disclosed pursuant to Item 404(a) of Regulation S-K of the Securities Act. In addition, there are no arrangements or understandings between Mr. Rasmus and any other persons pursuant to which Mr. Rasmus was selected as an officer of the Company.

Item 8.01 Other Events

On July 17, 2023, the Company issued a press release announcing the management changes described in this Current Report on Form 8-K, the full text of which is filed herewith as Exhibit 99.1.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
10.1	<u>Subscription Agreement by and between Robert E. Rasmus, RER Legacy Investments II LLC and Advanced Emissions Solutions, Inc., dated July 17, 2023.</u>
10.2	<u>Employment Agreement by and between Robert E. Rasmus and Advanced Emissions Solutions, Inc., dated July 17, 2023.</u>
99.1	<u>Press Release, dated July 17, 2023.</u>
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

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

Date: July 17, 2023

Advanced Emissions Solutions, Inc.

Registrant

/s/ Morgan Fields

Morgan Fields

Chief Accounting Officer

SUBSCRIPTION AGREEMENT

This SUBSCRIPTION AGREEMENT (this "Subscription Agreement") is entered into this July 17, 2023, by and between Advanced Emissions Solutions, Inc., a Delaware corporation (the "Issuer"), and each of the undersigned (each a "Subscriber" and collectively, the "Subscribers").

WHEREAS, concurrent herewith, the Issuer is entering into that certain Employment Agreement, dated as of July 17, 2023 (as may be amended or supplemented from time to time, the "Employment Agreement"), whereby, among other things, Robert E. Rasmus will be employed as Chief Executive Officer of the Issuer; and

WHEREAS, in accordance with the Employment Agreement and on the terms and subject to the conditions set forth in this Subscription Agreement, each 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 below such Subscriber's signature (their "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 each Subscriber their Acquired Shares in consideration of the payment of the Purchase Price set forth on the signature page hereto below such Subscriber's signature (the "Purchase Price") by or on behalf of such Subscriber to the Issuer at the Closing (as defined herein).

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, each Subscriber hereby irrevocably subscribes for and agrees to purchase, and the Issuer hereby agrees to issue and sell to such Subscriber, upon the payment of the Purchase Price, their Acquired Shares (such subscription and issuance, the "Subscription").

2. Purchase Price. For purposes of this Subscription Agreement, the "Per Share Purchase Price" shall be equal to \$1.894737.

3. Closing.

a. The closing of the Subscription contemplated hereby (the "Closing") shall take place on the earlier of (i) 30 calendar days after the date hereof and (ii) such earlier date as may be designated by the Subscribers upon at least two business days prior notice to the Issuer (such date, the "Closing Date").

b. At the Closing:

(i) Each Subscriber shall deliver to the Issuer the Purchase Price for their 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 each Subscriber their Acquired Shares against and upon payment by such 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 the applicable Subscriber or to a custodian designated by such 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 has been duly authorized, executed and delivered by the Issuer and is enforceable against the Issuer 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.

d. Assuming the accuracy of the Subscribers' representations and warranties in Section 5, the execution and delivery by the Issuer of this Subscription Agreement, and the performance by the Issuer of its obligations under this Subscription Agreement, 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 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 is bound or to which any of the property or assets of the Issuer is subject, which would have a material adverse effect on the business, properties, financial condition, stockholders' equity or results of operations of the Issuer (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 any of its 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.

e. 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.

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

a. If Subscriber is an entity, Subscriber has been duly formed or incorporated and is validly existing 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 their 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 (if applicable) 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 his 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 or 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 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. The Subscriber is not (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 further represents and warrants 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. Subscriber has sufficient funds to pay the Aggregate Purchase Price pursuant to Section 3.b(i).

6. Additional Agreements.

a. Each Subscriber hereby represents, warrants, covenants and agrees that, prior to the Closing Date, neither such Subscriber nor any person or entity acting on behalf of such Subscriber or pursuant to any understanding with such 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 the Subscribers 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 a 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 its 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.

7. Miscellaneous.

a. The Issuer and each 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 a 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 a Subscriber such additional information as the Issuer may reasonably deem necessary to evaluate the eligibility of such Subscriber to acquire the Acquired Shares, and such 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 such 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 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 a Subscriber, to such address or addresses set forth on the signature page hereto below such Subscriber's signature;
- i) 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:

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.

1. 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 7.1.

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

n. 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 7.1, 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: /s/ L. Spencer Wells
Name: L. Spencer Wells
Title: Chairman of the Board of Directors

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

Subscribers:

RER LEGACY INVESTMENTS II LLC

By: /s/ Robert E. Rasmus
Name: Robert E. Rasmus
Title: Sole Member

Address: _____
Email: _____
Phone Number: _____

Number of Common Shares subscribed for: 527,779

Purchase Price: \$1,000,002.32

Subscriber must pay the Purchase Price by wire transfer of United States dollars in immediately available funds to the account previously specified by the Issuer in writing.

/s/ Robert E. Rasmus

Robert E. Rasmus

Address:

Email:

Phone Number:

Number of Common Shares subscribed for: 422,221

Purchase Price: \$799,997.68

Subscriber must pay the Purchase Price 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
RER LEGACY INVESTMENTS II LLC

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(c) 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.

SCHEDULE A
ELIGIBILITY REPRESENTATIONS OF SUBSCRIBER

ROBERT E. RASMUS

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.
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 - 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.
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 - 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.

ADVANCED EMISSIONS SOLUTIONS, INC.

EMPLOYMENT AGREEMENT

THIS AGREEMENT made and entered into as of July 17, 2023, by and between Advanced Emissions Solutions, Inc., a Delaware corporation, whose principal offices are located at 8051 E. Maplewood, Suite 210, Greenwood Village, CO 80111 (the “Company”), and Robert E. Rasmus (“Executive”) whose address is .

RECITALS:

WHEREAS, the Company has made Executive an offer of employment; and

WHEREAS, Executive desires to accept the offer; and

WHEREAS, the Company and Executive desire to enter into this Agreement to set forth the terms and conditions of the employment.

NOW, THEREFORE in consideration of the premises and the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, hereby agree as follows:

1. Definitions. Capitalized terms are used herein with the meanings as specified in Sections 6 and 14(a) hereof.
2. Employment. The Company hereby employs Executive and Executive hereby accepts such employment upon the terms and conditions set forth herein, such employment to commence on or about July 17, 2023 (the “Start Date”). Executive’s employment with the Company is for an indefinite term, subject to termination as provided for in Section 13.
3. Position, Duties and Authority. During the term of this Agreement, Executive shall be employed as Chief Executive Officer and shall report to the board of directors (the “Board”) of the Company. Effective as of the Start Date, Executive shall also be appointed as a member of the Board. This is a full-time, salaried, exempt position. In reliance upon the promises made by Executive in this Agreement, the Company will provide Executive with access to Confidential Subject Matter (including trade secrets) related to Executive’s position and/or the opportunity to develop relationships with the Company’s employees, agents, and customers for the purpose of developing goodwill for the Company. Executive agrees that Executive’s receipt of the foregoing would give Executive an unfair competitive advantage if Executive’s activities during employment, and for a reasonable period thereafter, were not restricted as provided for in this Agreement. Further, Executive stipulates that the non-compete restriction in Section 14(b) and the customer non-solicit in Section 14(c) are reasonable and necessary for the protection of trade secrets within the meaning Colorado Revised Statutes § 8-2-113.
4. Obligations of Executive. Executive hereby agrees that Executive will devote a minimum of 40 hours per week to the fulfillment of Executive’s obligations hereunder.
5. Compensation and Benefits. In consideration of Executive’s agreement to be employed by the Company and as reasonable compensation for services to be rendered hereunder, the Company agrees as follows:
 - (a) Benefits. Executive shall be entitled to the standard benefits and perquisites from time to time available to full-time employees of the Company as outlined in the Employee Handbook.
 - (b) Compensation.
 - (i) Base Salary. The Company shall pay Executive on the Company’s normal payroll schedule, as in effect from time to time, at a rate that equates to an annual salary of fifty thousand dollars (\$50,000).
 - (ii) Annual Bonus. Executive shall be eligible for an annual bonus, with a target bonus equal to 100% of Executive’s base salary for the year, a maximum payout of 200% of Executive’s base salary, based on Company performance relative to targets, all as established and evaluated by the Compensation Committee of the Board.

(iii) Long Term Incentive Compensation. Executive shall be eligible to receive long-term incentive compensation, with a target award each year equal to 75% of Executive's base salary for the year, subject to the terms and conditions of the applicable award agreement as determined by the Board or the Compensation Committee of the Board.

(iv) Inducement Equity. As a material inducement to entering into this Agreement, the Executive shall have the rights to purchase equity in the Company and to receive grants of equity and equity-based awards on the terms and conditions set forth in the Inducement Equity Schedule attached hereto as Exhibit A.

(v) Sign-On Bonus. Within ninety (90) days following the Start Date, the Company shall make a lump sum payment to Executive of one hundred and twenty-five thousand dollars (\$125,000), which is intended to help offset Executive's travel, temporary housing, car rentals, meals and other incidental expenses incurred in connection with commencing his employment with the Company (the "Sign-on Bonus"). In the Event Executive's employment is terminated by the Company for Cause or Executive resigns without Good Reason (each as defined below), in either case within twelve (12) months following the Start Date, Executive shall repay the gross amount of the Sign-on Bonus to the Company. For the avoidance of doubt, a termination of Executive's employment on account of death or Disability (as defined below) shall not trigger the repayment obligation set forth in the preceding sentence. The Company shall provide a fixed office for Executive in the Denver, Colorado area and reimburse Executive for travel expenses for necessary business travel, consistent with the Company's expense reimbursement policy in effect from time to time. The Company acknowledges that the Executive has not committed to permanently relocate his primary residence.

6. Definitions.

(a) "affiliate" shall mean any entity directly or indirectly controlled by, under common control with or otherwise a joint venture partner of or joint venture entity of the Company.

(b) "Cause" shall mean Executive's (i) continued failure substantially to perform the material duties of Executive's office (other than as a result of total or partial incapacity due to physical or mental illness); (ii) fraud, embezzlement or theft by Executive of the property of the Company or any of its affiliates; (iii) the conviction of Executive of, or plea of nolo contendere by Executive to, a felony under the laws of the United States or any state or comparable crime under the laws of a foreign jurisdiction; (iv) Executive's gross negligence or willful misconduct in the performance of his duties to the Company or any of its affiliates; (v) a material breach by Executive of any material agreement between Executive and the Company or any of its affiliates; or (vi) Executive's material violation of any material written policy or code of conduct of the Company; , provided that, if such conduct is capable of cure, in the case of clauses (i), (v), or (vi), Executive shall have 10 business days following reasonably detailed written notice from the Board of such conduct or circumstances to cure the same to the reasonable satisfaction of the Board, and if uncured following such 10-business day period, such conduct or circumstances shall constitute "Cause" for purposes hereof.

(c) "Confidential Subject Matter" shall mean all Inventions, Copyright Works, data, specifications, know-how, lists, printed materials, technical information, cost/pricing/marketing information and other subject matter, including trade secrets, that is not available to the general public in a substantially identical form without restriction.

(d) "Copyright Works" shall mean all literary works, graphic works, pictorial works and other creative works for which copyright protection may be obtained, including without limitation proposals and computer software documentation.

(e) "Disability" shall mean Executive's physical or mental incapacitation such that prevents Executive from performing Executive's duties, with or without a reasonable accommodation, for a period of six consecutive months or where such condition is likely to result in Executive's death. Any question as to the existence of Executive's physical or mental incapacitation that is subject to dispute shall be determined in writing by a qualified independent physician mutually acceptable to the Company and Executive.

(f) "Good Reason" shall mean the occurrence of any of the following without Executive's written consent: (i) any reduction of Executive's base salary or target annual bonus, (ii) a material breach by the Company or any affiliate of the Company of its obligations under this Agreement or any other material agreement with Executive, (iii) any requirement by the Company that Executive relocate his primary residence, or (iv) a material diminution of Executive's title, authority or responsibilities as Chief Executive Officer or Executive's failing to report directly to the Board; provided, however, that in order for any such event or occurrence to constitute "Good Reason" hereunder (1) Executive must provide the Board with reasonably detailed written notice of such event or occurrence within 30 days of the initial occurrence thereof, (2) the Company shall have 15 days following receipt of such notice to cure the same, and (3) if uncured following such 15-day period, such conduct or circumstances shall constitute "Good Reason" for purposes hereof.

(g) "Invention" shall mean any idea, discovery, article, process, formulation, composition, combination, design, modification or improvement, whether or not patentable.

7. Disclosure/Ownership of Invention and Confidential Subject Matter.

(a) Prior to Employment. Executive agrees that Exhibit B provides adequate description and disclosure of Inventions and Confidential Information considered owned by Executive or third party with whom Executive is contractually bound prior to becoming employed by the Company. Throughout the term of this agreement and following its termination, even in the case of breach of contract by either party, the items identified in Exhibit B are considered the property of Executive ("Employee Intellectual Property") or of a third-party ("Third Party Intellectual Property"). Although Exhibit B may not be all inclusive of all intellectual property owned by Executive or third parties, any ownership rights Executive wishes to defend must be itemized in Exhibit B. Executive may amend Exhibit B at any time as long as the claim can be supported with documentation demonstrating the rightful ownership of Executive or third party.

(b) During Employment. Executive agrees that during the term of Executive's employment with Company, Executive will immediately disclose in writing to Company all Inventions and Confidential Subject Matter which (i) is conceived or generated by Executive alone and/or jointly with others, and (ii) relates to the actual or anticipated business of the Company and/or relates to the actual or anticipated research or development activities of the Company and/or is otherwise suggested by or results from any activity performed on behalf of the Company. Executive acknowledges and agrees that immediately upon conception or generation, whichever occurs earlier, all such Inventions and Confidential Subject Matter disclosed and to be disclosed by Executive to Company pursuant to the preceding sentence and during the term of Executive's employment with Company will be the sole and exclusive property of the Company.

(c) Post-Employment. Executive further agrees that, during the two (2) year period following any termination of Executive's employment with the Company, Executive will immediately disclose in writing to the Company all Inventions and Confidential Subject Matter which (i) is conceived or generated by Executive alone and/or jointly with others, and (ii) is based upon or otherwise derived from any Inventions and/or Confidential Subject Matter of the Company. Executive acknowledges and agrees that immediately upon conception or generation, whichever occurs earlier, all such Inventions and Confidential Subject Matter to be disclosed by Executive to Company pursuant to the preceding sentence during the two (2) year period following the termination of Executive's employment with Company will become the sole and exclusive property of the Company.

8. Assignment of Inventions and Confidential Subject Matter, Documentation and Commercialization.

(a) Assignment. Executive hereby assigns to Company the Executive's entire right, title and interest in and to all Inventions and Confidential Subject Matter disclosed and to be disclosed by Executive to Company pursuant to Sections 7 (a) and (b).

(b) Documentation. Executive agrees to execute, cooperate in the preparation of and deliver to the Company, both during the term of Executive's employment with the Company and thereafter, any and all documents deemed necessary by the Company for the Company to protect, maintain, preserve and enjoy the full right, title and interest to all Inventions and Confidential Subject Matter disclosed and to be disclosed by Executive to Company, including without limitation, the execution and delivery of patent assignments and, at Company's legal expense, the preparation of patent applications.

(c) Commercialization. Executive acknowledges and agrees that with respect to all Inventions and Confidential Subject Matter transferred by Executive to Company, Company is not obligated to commercialize the same, and that if Executive desires to independently commercialize any of said inventions and/or Confidential Subject Matter, Executive must request and obtain a written license from Company beforehand, which license request may be declined by Company in its sole discretion.

9. Copyright Works. Executive agrees that all Copyright Works and contributions to Copyright Works prepared by Executive within the scope of Executive's employment with the Company will be deemed "works for hire" and will be owned by the Company, and Executive agrees to execute all documents deemed necessary by the Company for the Company to protect, maintain, preserve and enjoy the Company's rights in such Copyright Works and contributions. Executive further agrees that unless expressly authorized by the Company in writing, Executive will not independently prepare or otherwise distribute or publish any Copyright Work that embodies any Confidential Subject Matter owned by the Company or held in Confidence by the Company for any third party, including without limitation, all Confidential Subject Matter disclosed and to be disclosed by Executive to the Company.

10. Written Records. Executive agrees that to the extent reasonably possible, Executive will maintain written records of all Inventions and Confidential Subject Matter conceived or generated by Executive in the course of and with respect to Executive's performance of services for the Company, which records will be the exclusive property of the Company and will be available to the Company at all times.

11. Restrictive Obligations Relating to Confidential Subject Matter.

(a) Obligations to Company. Executive agrees to maintain in strict confidence, and agrees not to use, disclose, reproduce or publish, except to the extent necessary in the course of the Executive's performance of services for the Company, as required by court order or applicable legal or regulatory requirements, or as otherwise authorized by Company, any Confidential Subject Matter owned by the Company or held in confidence by the Company for any third party, including without limitation, all Confidential Subject Matter disclosed and to be disclosed by Executive to the Company.

(b) Prior Obligations to Third-Parties. Executive agrees that, in the course of Executive's employment with the Company, Executive will not use or disclose any third party's Confidential Subject Matter with respect to which Executive, prior to Executive's initiation of employment with the Company, assumed obligations restricting such use or disclosure

(c) Limitation. Nothing in this Agreement prohibits disclosure of information that arises from Executive's general training, knowledge, skill, or experience, whether gained on the job or otherwise, information that is readily ascertainable to the public, or information that Executive otherwise has a right to disclose as legally protected conduct.

12. Conflicting Obligations.

(a) Prior Obligations. Executive acknowledges and agrees that Executive is under no obligations to any third party which conflict or may conflict, in any way, with any of the Executive's obligations hereunder.

(b) Assumption of Obligations. Executive agrees that, during the term of Executive's employment with the Company, Executive will not assume any obligations to any third- party that would conflict with any of Executive's obligation hereunder. Executive further agrees that, during the term of Executive's employment with the Company, Executive will not compete, and will not provide services to others who compete with the Company in the research, development, production, marketing or servicing of any product, process or service with respect to which the Company is involved.

(c) Confidentiality Obligations to Former Employers. Executive affirms that Executive did not remove or take any documents or proprietary data or materials of any kind, electronic or otherwise, with Executive from Executive's former employer to the Company. Executive further affirms that Executive will not use or disclose proprietary information, materials, or documents belonging to any former employer in the course of Executive's job duties for the Company.

13. Termination of Employment.

(a) At-Will Employment. As an “at-will” employee, either Executive or the Company may terminate the employment relationship at any time and for any or no cause.

(b) Payments to Executive Following Termination of Employment.

(i) In the event Executive’s employment terminates for any reason, the Company shall pay to Executive all amounts legally required to be paid to Executive (the “Accrued Compensation”) at a time and in a manner that is compliant with applicable state law.

(ii) In the event Executive’s employment is terminated by the Company other than for Cause or in the event Executive resigns his employment with the Company for Good Reason, the Company shall pay to Executive as severance (the “Severance Pay”) an amount equal to Executive’s annual base salary as in effect at the time of such termination of employment plus an amount equal to Executive’s annual bonus for the year of termination, determined at target.

(iii) Payment of the Severance Pay shall be contingent on Executive executing and not thereafter revoking a release of claims Executive may otherwise have against the Company, its affiliates or its officers, in substantially the form attached hereto as Exhibit C as updated to reflect changes in law (the “Release”). Payment of the Severance Pay shall be made as a lump sum payable as soon as practicable following the date the Release becomes irrevocable by its terms, but in no event later than March 15 of the calendar year following the calendar year in which such termination of employment occurs (and if the maximum period for execution and revocation of the Release spans two calendar years, payment shall be made in the later taxable year).

(iv) For purposes of clarity and avoidance of doubt, the Severance Pay shall not be payable in the event Executive’s employment terminates by reason of Executive’s death or Disability.

(c) Continuing Obligations. Executive’s obligations under Sections 8 through 11 and Section 14 of this Agreement will continue after any termination of Executive’s employment with the Company.

(d) Submission of Materials. Upon any termination of Executive’s employment with Company, Executive will submit to the Company all materials within Executive’s possession that constitute or include Confidential Subject Matter owned by the Company or held in confidence by the Company for any third-party.

(e) Exit Interview. Upon termination of Executive’s employment with the Company, Executive will attend an exit interview with an appropriate representative of the Company to review the continuing obligations of Executive hereunder.

14. Restrictive Covenants.

(a) Definitions.

(i) “Competing Business” means any person or entity that engages in (or is planning to engage in) the development, manufacturing, marketing or sale of a Competing Product or Service.

(ii) “Competing Product or Service” means any non-Company product or service that is the same as or similar to a product or service provided by the Company (or that otherwise competes with a product or service provided by the Company) with which Executive had involvement or about which Executive received Confidential Subject Matter owned by the Company or held in confidence by the Company for any third-party during the last two years of Executive’s employment with the Company (or such shorter time as Executive was employed) (the “Look Back Period”).

(iii) “Customer” means any customer or prospective customer of the Company about whom Executive received trade secrets during Executive’s employment with the Company.

(iv) “Restricted Area” means (i) those states and counties in which Executive participated in the Company’s business or about which Executive was provided access to Confidential Subject Matter owned by the Company or held in confidence by the Company for any third-party during the Look Back Period; and, (ii) the state of Colorado.

(v) “Restricted Employee” means any employee of the Company with whom Executive worked, whom Executive supervised, or about whom Executive acquired Confidential Subject Matter owned by the Company or held in confidence by the Company for any third-party.

(vi) “Restricted Period” shall include: (A) the period of Executive’s employment with the Company; and (B) the two-year period after Executive’s employment with the Company ends, regardless of the reason it ends.

(vii) “Solicit” means to interact with someone in an effort to cause or encourage the person or entity to do something, regardless of which party first initiates contact.

(b) Non-Compete. To protect the Company’s trade secrets, Executive agrees that during the Restricted Period, Executive will not (directly or by assisting or directing others), within the Restricted Area: (i) provide services for the benefit of a Competing Business that are the same or similar in function or purpose to those Executive provided to the Company during the Look Back Period; or (ii) take on any other responsibilities for a Competing Business that would involve the likely or probable use or disclosure of trade secrets to the benefit of the Competing Business or detriment of the Company.

(c) Customer Non-Solicit. To protect the Company’s trade secrets, Executive agrees that during the Restricted Period, Executive will not (directly or by assisting or directing others): (i) solicit, or attempt to solicit, a Customer for the purpose of doing any business that would compete with the Company’s business; or (ii) induce the Customer to, or knowingly engage in any other conduct that is intended to cause the Customer to, cease or reduce the extent to which it is doing business with the Company.

(d) Employee Non-Solicit. To protect the Company’s Confidential Subject Matter (including trade secrets) and key business relationships, Executive agrees that during the Restricted Period, Executive will not (directly or by assisting or directing others): (a) solicit, or attempt to solicit, any Restricted Employee to leave the employment of the Company; or, (b) on behalf of a Competing Business (whether directly or through a staffing agency), recruit or facilitate the hiring, or attempt to recruit or facilitate the hiring, of any Restricted Employee.

(e) Acknowledgment. Nothing herein is intended or to be construed as a prohibition against general advertising such as “help wanted” ads that are not targeted at the Company’s employees. This Agreement is also not intended to prohibit (i) employment with a non-competitive independently operated subsidiary, division, or unit of a family of companies that include a Competing Business, so long as the employing independently operated business unit is truly independent and Executive’s services to it do not otherwise violate this Agreement; (ii) a passive and non-controlling ownership of less than 2% of the stock in a publicly traded company; or (iii) Executive’s management of his personal and family investments, provided that such activities do not interfere with Executive’s performance of his duties to the Company in any material respect. This provision further does not preclude conduct protected by Section 7 of the NLRA such as joining or forming a union, engaging in collective bargaining, or engaging in other concerted activity for mutual aid and protection. The restrictions contained in Sections 14(c) and 14(d) above are understood to be reasonably limited by geography to those locations, and counties, where the Customer and Restricted Employee are present and available for solicitation. However, to the extent additional geographic limitations are required to make the restrictions enforceable, they shall be deemed limited to the Restricted Area.

(f) Limitations. If Executive does not earn an amount of annualized cash compensation equivalent to or greater than the threshold amount for highly compensated workers, \$112,500 (or the earnings threshold in effect as adjusted annually after August 10, 2022, by the Colorado Division of Labor Standards and Statistics in the Department of Labor and Employment), then the non-compete restrictions in Section 14(b) shall not apply after Executive’s employment with the Company ends. If Executive does not earn an amount of annualized cash compensation equivalent to or greater than sixty percent of the threshold amount for highly compensated workers (or the earnings threshold in effect as adjusted annually after August 10, 2022, by the Colorado Division of Labor Standards and Statistics in the Department of Labor and Employment), then the customer non-solicit in Section 14(c) shall not apply after Executive’s employment with the Company ends.

(g) Notice. Executive acknowledges that Executive received notice of the covenants not to compete in this Agreement and their terms in a separate document before Executive accepted Executive's offer of employment, or, if a current employee at the time Executive enters into this Agreement, at least 14 days before the earlier of the effective date of the Agreement or the effective date of any additional compensation or change in the terms or conditions of Executive's employment that provides consideration for the covenants not to compete.

15. Miscellaneous.

(a) Binding-Effect/ Assignability. This Agreement is not assignable by Executive and will be binding upon Executive's heirs, executors, administrators and other legal representatives. This Agreement shall automatically inure to the benefit of the Company and any parent, subsidiaries or affiliates to which Executive provides services or about which Executive acquires Confidential Subject Matter, and their successor(s) and assigns, and may be enforced by any one or more of same who have a legitimate business interest that would be protected by enforcement of this Agreement. Executive consents to the assignment of this Agreement by the Company at its discretion, including, without limitation, as part of a sale, merger, or other transaction including without limitation an asset sale or assignment, stock sale, merger, consolidation or other corporate reorganization.

(b) Severability. Should any provision of this Agreement be determined by a court of competent jurisdiction to violate or contravene any applicable law or policy, such provision will be severed and modified to the extent necessary to comply with the applicable law or policy, and such modified provision and the remainder of the provisions hereof will continue in full force and effect.

(c) Waiver. Any delay or omission on the part of Company to exercise any right under this Agreement will not automatically operate as a waiver of such right or any other right; and that a waiver of any right of the Company hereunder on one occasion will not be construed as a bar to or waiver of any right on any future occasion.

(d) Controlling Law. This Agreement will be interpreted under and enforced in accordance with the laws of the State of Colorado.

(e) Modification. This Agreement may only be modified by the mutual written agreement of Executive and Company.

(f) Notices. Any notice or communication required or permitted to be given by this Agreement shall be deemed given and effective when delivered personally, or when sent by registered or certified mail, postage prepaid, addressed as follows (such addresses for giving of notice may be changed by notice similarly given):

(i) If to the Company:

Advanced Emissions Solutions, Inc.
Attention: Human Resources
8051 E. Maplewood, Suite 210
Greenwood Village, CO 80111

(ii) If to Executive:

Robert E. Rasmus

(g) Notice to Employer(s). Executive will provide any prospective employer Executive is considering an offer from with notice of this Agreement at least ten days before accepting such offer. The Company may elect to provide another party notice of this Agreement and an opinion about its applicability.

(h) Arbitration. Any difference, claims or matters in dispute arising between Executive and the Company out of this Agreement or connected with Executive's employment shall be submitted by Executive and the Company to binding arbitration by a single arbitrator selected by the mutual agreement of the parties from members of the Judicial Arbitrator Group of Denver, Colorado, or its successor. The arbitration shall be governed by the rules and regulations of the Judicial Arbitrator Group or its successor and the pertinent provisions of the laws of the State of Colorado relating to arbitration. The decision of the arbitrator may be entered as a judgment in any court in the State of Colorado or elsewhere. The prevailing party shall be entitled to receive reasonable attorneys' fees incurred in connection with such arbitration in addition to such other costs and expenses as the arbitrator may award.

(i) At-Will Employment. Employment with the Company is at will, meaning that both the Company and the Executive have the right to terminate the work relationship at any time, without advance notice, and for any reason.

(j) Entire Agreement. This Agreement together with the exhibits hereto constitute the entire agreement between the parties and their affiliates with respect to the subject matter hereof, supersedes all prior and contemporaneous agreements or understandings relating to said subject matter, and no amendment hereof shall be deemed valid unless in writing and signed by the parties hereto.

(k) Section 409A. Notwithstanding any provision of this Agreement to the contrary, all provisions of this Agreement are intended to comply with Section 409A of the Internal Revenue Code of 1986 (the "Code"), and the applicable Treasury regulations and administrative guidance issued thereunder (collectively, "Section 409A") or an exemption therefrom and shall be construed and administered in accordance with such intent. Any payments under this Agreement that may be excluded from Section 409A either as separation pay due to an involuntary separation from service or as a short-term deferral shall be excluded from Section 409A to the maximum extent possible. For purposes of Section 409A, each installment payment provided under this Agreement shall be treated as a separate payment. Any payments to be made under this Agreement upon a termination of Executive's employment shall only be made if such termination of employment constitutes a "separation from service" under Section 409A to the extent necessary to comply with Section 409A. To the extent that any right to reimbursement of expenses or payment of any benefit in-kind under this Agreement constitutes nonqualified deferred compensation (within the meaning of Section 409A), (i) any such expense reimbursement shall be made by the Company no later than the last day of Executive's taxable year following the taxable year in which such expense was incurred by Executive, (ii) the right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit, and (iii) the amount of expenses eligible for reimbursement or in-kind benefits provided during any taxable year shall not affect the expenses eligible for reimbursement or in-kind benefits to be provided in any other taxable year; provided, that the foregoing clause shall not be violated with regard to expenses reimbursed under any arrangement covered by Section 105(b) of the Code solely because such expenses are subject to a limit related to the period in which the arrangement is in effect. Notwithstanding any provision in this Agreement to the contrary, if any payment or benefit provided for herein would be subject to additional taxes and interest under Section 409A if Executive's receipt of such payment or benefit is not delayed until the earlier of (i) the date of Executive's death or (ii) the date that is six months after the Termination Date (such date, the "Section 409A Payment Date"), then such payment or benefit shall not be provided to Executive (or Executive's estate, if applicable) until the Section 409A Payment Date. Notwithstanding the foregoing, the Company makes no representations that the payments and benefits provided under this Agreement are exempt from, or compliant with, Section 409A and in no event shall the Company or any of its affiliates be liable for all or any portion of any taxes, penalties, interest or other expenses that may be incurred by Executive on account of non-compliance with Section 409A.

16. Effective Date. The effective date of this Agreement shall be the date signed by Executive below unless this Agreement is entered into as a condition of initial employment or promotion in which case the effective date is the first day of Executive's employment in such new position (whether reduced to writing on that date or not); provided, however, the effective date will be no earlier than 14 days following Executive's initial receipt of this Agreement.

17. **Clawback.** Notwithstanding any other provisions in this Agreement, any Incentive-Based Compensation, as such term is defined in the Clawback Policy (as defined below) that is paid to Executive or that Executive may receive from the Company shall be subject to recovery or clawback by the Company under any reasonable, market-consistent clawback policy adopted by the Company from time to time (the “Clawback Policy”), provided such Clawback Policy is applicable to all executive officers of the Company, and provided further that, unless otherwise agreed to between the Executive and the Company or required by applicable law or stock exchange listing standards, such Clawback Policy shall not be applicable to Executive except to the extent a recovery or clawback of Incentive-Based Compensation is required under the Clawback Policy because the Company is required under GAAP, applicable securities laws, or applicable stock exchange listing standards to restate its financial statements with respect to fiscal periods ending after the Start Date due to material non-compliance with any financial reporting requirement under the federal securities laws (including any such correction that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the then current period or left uncorrected in the current period). Executive expressly acknowledges and agrees that in connection with the enforcement of such clawback policy, the Company shall have the right to reduce, cancel, or withhold against outstanding, unvested, vested, or future cash, equity or equity-based compensation owed or due to Executive and Executive agrees to repay to the Company any incentive compensation previously paid to Executive that is subject to such policy, in each case, to the maximum extent permitted under applicable law. No recovery of compensation under a clawback policy will be an event giving rise to a right to resign for Good Reason or “constructive termination” (or similar term) under any agreement with the Company.

18. **PROTECTED CONDUCT NOTICE.** Nothing in this Agreement prohibits Executive from (a) opposing an event or conduct that Executive reasonably believes is a violation of law, including criminal conduct, discrimination, harassment, retaliation or other unlawful employment practices, (b) disclosing sexual assault or sexual harassment; or (c) reporting such an event or conduct to their attorney, law enforcement, or the relevant law-enforcement agency (such as the Securities and Exchange Commission, Equal Employment Opportunity Commission, the state division of civil rights, or a local commission on civil rights), or (d) making any truthful statements or disclosures required by law or otherwise cooperating in an investigation conducted by any government agency (collectively referred to as “Protected Conduct”). Further, nothing requires notice to or approval from the Company before engaging in such Protected Conduct.

19. **DTSA NOTICE.** The DTSA provides that no individual will be held criminally or civilly liable under federal or state trade-secret law for the disclosure of a trade secret that: (a) is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney; and made solely for the purpose of reporting or investigating a suspected violation of law; or, (b) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal so that it is not made public. It also provides that an individual who pursues a lawsuit for retaliation by an employer for reporting a suspected violation of the law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding if the individual files any document containing the trade secret under seal and does not disclose the trade secret except as permitted by court order.

20. **Legal Fees.** Promptly following receipt of copies of invoices therefor, the Company shall pay or reimburse Executive for up to \$20,000 in legal fees and expenses that Executive incurs in connection with Executive’s hiring by the Company, including the negotiation and preparation of this Agreement and other agreements contemplated hereby or relating hereto.

IN WITNESS WHEREOF, the parties have signed or caused this Agreement to be signed by their duly authorized officers as of the day and year first above written.

ADVANCED EMISSIONS SOLUTIONS, INC.

By: /s/ L. Spencer Wells

Its: Chairman of the Board of Directors

EXECUTIVE

/s/ Robert E. Rasmus

Robert E. Rasmus

Exhibit A

Inducement Equity Schedule

In compliance with applicable law (including relevant securities regulations), as a material inducement for Executive to enter into this Agreement, Executive shall be provided with the following as soon as practicable following the Start Date:

1. Executive shall be granted an option (the "Option") to acquire one million (1,000,000) shares of the Company's common stock at an exercise price of three dollars (\$3.00) per share (or, if greater, the fair market value per share on the date of grant), on the following terms and conditions:

(a) Subject to Executive's continued employment through the applicable vesting date, the Option shall become vested and exercisable for:

(i) 333,333 shares on the first (1st) anniversary of the Start Date;

(ii) 333,333 shares on the second (2nd) anniversary of the Start Date; and

(iii) the final 333,334 shares subject to the Option as of the third (3rd) anniversary of the Start Date.

Notwithstanding the foregoing, any unvested portion of the Option shall automatically accelerate and become 100% vested and immediately exercisable upon (i) the Company's termination of Executive's employment without Cause or his resignation for Good Reason, or (ii) the occurrence of a Change in Control (as defined in the advanced Emissions Solutions, Inc. 2022 Omnibus Incentive Plan). Upon any other termination of employment prior to the occurrence of a Change in Control, any unvested portion of the Option shall be forfeited immediately.

(b) The Option shall expire in all events on the tenth (10th) anniversary of the Start Date, but any vested portion of the Option shall expire on an accelerated basis 90 days following Executive's termination of employment with the Company; provided, however, that in the event of Executive's termination by the Company without Cause, resignation for Good Reason, or as a result of Executive's death or Disability, any vested portion of the Option shall instead expire one year following Executive's termination of employment with the Company. Notwithstanding the foregoing, in the event Executive is terminated by the Company for Cause, the Option (whether then vested or unvested) shall expire on the date of such termination of employment.

2. On the Start Date, Executive shall purchase 950,000 shares of common stock of the Company for a purchase price equal to \$1,800,000.

3. Executive shall be granted an award of 400,000 restricted stock units ("RSUs"), with each restricted stock unit representing the right to receive one share of the Company's common stock upon satisfaction of the following vesting conditions on or prior to the third anniversary of the Start Date, in each case, subject to Executive's continued employment through such vesting date:

(a) 250,000 RSUs will vest when the volume weighted average price ("VWAP") of the Company's common stock over any 30-day period equals \$10.00 per share; and

(b) 150,000 RSUs will vest when the VWAP of the Company's common stock over any 30-day period equals \$15.00 per share.

4. Notwithstanding anything set forth above in this Exhibit A, the grant of the Option and the RSUs and the issuance of the shares, may be modified to the extent necessary to comply with securities laws and regulations, stock exchange requirements, or as otherwise mutually agreed upon by the Company and Executive. The intent of any such modification is to comply with applicable law and regulations, while making the least possible modification to the underlying economics of the arrangements described.

Exhibit B
Inventions and Confidential Information Disclosures by Executive

N/A

Exhibit C
Form of Release

[Subject to change for changes in applicable law.]

This Release (this “Release”) is by and among Advanced Emissions Solutions, Inc., a Delaware limited liability company (the “Company”), and Robert E. Rasmus (“Employee”), and is effective as of the Effective Date (as defined in Section 10 below). The Company and Employee are referred to as the “Parties.”

WHEREAS, the Company and Employee entered into an Employment Agreement as of _____ (the “Employment Agreement”) (capitalized terms used in this Release and not otherwise defined shall have the meanings ascribed thereto in the Employment Agreement), and this Release is entered into by and between Employee and the Company pursuant to the Employment Agreement;

WHEREAS, because of Employee’s employment as an employee of the Company, Employee has obtained intimate and unique knowledge of all aspects of the Company’s business operations, current and future plans, financial plans and other confidential and proprietary information;

WHEREAS, Employee’s employment with the Company and all other positions, if any, held by Employee in the Company or any of its subsidiaries or Affiliates, including officer positions, terminated effective as of [date] (the “Separation Date”); and

WHEREAS, except as otherwise provided herein, the Parties desire to finally, fully and completely resolve all disputes that now or may exist between them, including, but not limited to those concerning the Employment Agreement (except for the post-termination obligations contained in the Employment Agreement), Employee’s job performance and activities while employed by the Company and Employee’s hiring, employment and separation from the Company, and all disputes over benefits and compensation connected with such employment;

NOW, THEREFORE, in consideration of the premises and mutual covenants and agreements hereinafter set forth, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

1. Termination of Employee’s Employment. Employee’s employment with the Company terminated on the Separation Date.
2. General Release and Waiver. In consideration of the severance payments and other consideration provided for in the Employment Agreement, Employee, on Employee’s own behalf and on behalf of Employee’s agents, administrators, representatives, executors, successors, heirs, devisees and assigns (collectively, the “Releasing Parties”) hereby fully releases, remises, acquits and forever discharges the Company and all of its affiliates, and each of their respective past, present and future officers, directors, shareholders, equity holders, members, partners, agents, employees, consultants, independent contractors, attorneys, advisers, successors and assigns (collectively, the “Released Parties”), jointly and severally, from any and all claims, rights, demands, debts, obligations, losses, causes of action, suits, controversies, setoffs, affirmative defenses, counterclaims, third party actions, damages, penalties, costs, expenses, attorneys’ fees, liabilities and indemnities of any kind or nature whatsoever (collectively, the “Claims”), whether known or unknown, suspected or unsuspected, accrued or unaccrued, whether at law, equity, administrative, statutory or otherwise, and whether for injunctive relief, back pay, fringe benefits, reinstatement, reemployment, or compensatory, punitive or any other kind of damages, which any of the Releasing Parties ever have had in the past or presently have against the Released Parties, and each of them, arising from or relating to Employee’s employment with the Company or its Affiliates or the termination of that employment or any circumstances related thereto, or (except as otherwise provided below) any other matter, cause or thing whatsoever, including without limitation all claims arising under or relating to employment, employment contracts, employee benefits or purported employment discrimination or violations of civil rights of whatever kind or nature, including without limitation all claims arising under the Age Discrimination in Employment Act (“ADEA”), the Americans with Disabilities Act, as amended, the Family and Medical Leave Act of 1993, the Equal Pay Act of 1963, the Rehabilitation Act of 1973, Title VII of the United States Civil Rights Act of 1964, 42 U.S.C. § 1981, the Employee Retirement Income Security Act, the Civil Rights Act of 1991, the Civil Rights Acts of 1866 and/or 1871, the Genetic Information Nondiscrimination Act, the Colorado Anti-Discrimination Act (CADA), the Colorado Minimum Wage Order, the Colorado Labor Relations Act, the Colorado Labor Peace Act, or any other applicable federal, state or local employment statute, law or ordinance, including, without limitation, any disability claims under any such laws, claims for wrongful discharge, claims arising under state law, contract claims including breach of express or implied contract, alleged tortious conduct, claims relating to alleged fraud, breach of fiduciary

duty or reliance, breach of implied covenant of good faith and fair dealing, and any other claims arising under state or federal law, as well as any expenses, costs or attorneys' fees. Employee further agrees that Employee will not file or permit to be filed on Employee's behalf any such claim. Notwithstanding the preceding sentence or any other provision of this Release, this Release is not intended to interfere with Employee's right to file a charge with the Equal Employment Opportunity Commission (the "EEOC"), or other governmental agency, in connection with any claim Employee believes Employee may have against the Company or its Affiliates. However, by executing this Release, Employee hereby waives the right to recover in any proceeding Employee may bring before the EEOC or any other governmental agency or in any proceeding brought by the EEOC or other governmental agency on Employee's behalf. This Release shall not apply to any of the Company's obligations under this Release or post-termination obligations under the Employment Agreement, nor shall it apply to any of the Company's obligations under its charter documents, rights under the Colorado Employment Security Act (CESA) or any claim for violation of the Colorado Wage Act.

3. Return of Company Property. As soon as possible, Employee shall, to the extent not previously returned or delivered: (a) return all equipment, records, files, programs or other materials and property in Employee's possession which belongs to the Company or any of its affiliates, including, without limitation, all computers, printers, laptops, personal data assistants, cell phones, credit cards, keys and access cards; and (b) deliver all original and copies of Confidential Information in Employee's possession and notes, materials, records, plans, technical data or other documents, files or programs (whether stored in paper form, computer form, digital form, electronically or otherwise) in Employee's possession that contain Confidential Information. By signing this Release, Employee represents and warrants that Employee has not retained and has or will timely return and deliver all the items described or referenced in subsections (a) or (b) above; and, that should Employee later discover additional items described or referenced in subsections (a) or (b) above, Employee will promptly notify the Company and return/deliver such items to the Company.
4. Protected Rights. The Company and Employee acknowledge and agree that nothing contained in this Release limits Employee's ability to file a charge or complaint with the EEOC, the NLRB, OSHA, the SEC or any other federal, state or local governmental agency or commission ("Government Agencies"). The Company and Employee further acknowledge and agree that this Release does not limit Employee's ability to communicate with any Government Agencies or otherwise participate in any investigation or proceeding that may be conducted by any Government Agency, including providing documents or other information, without notice to the Company. This Release does not limit Employee's right to receive an award for information provided to any Government Agencies.
5. Not An Admission of Wrongdoing. This Release shall not in any way be construed as an admission by either Party of any acts of wrongdoing, violation of any statute, law or legal or contractual right.
6. Voluntary Execution of the Release. Employee and the Company represent and agree that they have had an opportunity to review all aspects of this Release, and that they fully understand all the provisions of this Release and are voluntarily entering into this Release. Employee further represents that Employee has not transferred or assigned to any person or entity any claim involving the Company or any portion thereof or interest therein.
7. Binding Effect. This Release shall be binding upon the Company and upon Employee and Employee's heirs, administrators, representatives, executors, successors and assigns and the Company's representatives, successors and assigns. In the event of Employee's death, this Release shall be binding on, and operate in favor of, Employee's estate and all payments, obligations and consideration will continue to be performed in favor of Employee's estate.
8. Severability. Should any provision of this Release be declared or determined to be illegal or invalid by any government agency or court of competent jurisdiction, the validity of the remaining parts, terms or provisions of this Release shall not be affected and such provisions shall remain in full force and effect.
9. Entire Agreement. Except for the post-termination obligations contained in the Employment Agreement and the terms of the limited liability company agreement of the Company and any grant of equity incentive awards thereunder, this Release sets forth the entire agreement between the Parties, and fully supersedes any and all prior agreements, understandings, or representations between the Parties pertaining to Employee's employment with the Company, the subject matter of this Release or any other term or condition of the employment relationship between the Company and Employee. Employee represents and acknowledges that in executing this Release, Employee does not rely, and has not relied, upon any representation(s) by the Company or its agents except as expressly contained in this Release or the

Employment Agreement. Employee and the Company agree that they have each used their own judgment in entering into this Release.

10. Consideration and Revocation Periods. Employee, by Employee's free and voluntary act of signing below, (a) acknowledges that Employee has been given a period of 21 days to consider whether to agree to the terms contained herein, (b) acknowledges that Employee has been, and is hereby, advised to consult with an attorney prior to executing this Release, (c) acknowledges that Employee understands that this Release specifically releases and waives all rights and claims Employee may have under the ADEA, prior to the date on which Employee signs this Release, and (d) agrees to all of the terms of this Release and intends to be legally bound thereby. The Parties acknowledge and agree that each Party has reviewed and negotiated the terms and provisions of this Release and has contributed to its preparation (with advice of counsel). Accordingly, the rule of construction to the effect that ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Release. Rather, the terms of this Release shall be construed fairly as to both Parties and not in favor of or against either Party, regardless of which Party generally was responsible for the preparation of this Release.

This Release will become effective, enforceable and irrevocable on the eighth day after the date on which it is executed by Employee (the "Effective Date"). During the seven-day period prior to the Effective Date, Employee may revoke Employee's agreement to accept the terms hereof by giving notice to the Company of Employee's intention to revoke. If Employee exercises Employee's right to revoke hereunder, Employee shall not be entitled, except as required by applicable wage payment laws, Severance Pay until Employee executes and does not revoke a comparable release of claims, and to the extent such payments or benefits have already been made, Employee agrees that Employee will immediately reimburse the Company for the amounts of such payments and benefits to which Employee is not entitled.

11. Notices. All notices and other communications hereunder will be in writing. Any notice or other communication hereunder shall be deemed duly given if it is delivered personally or sent by registered or certified mail, return receipt requested, postage prepaid, and addressed to the intended recipient as set forth at the foot of this Release. Any Party may change the address to which notices and other communications are to be delivered by giving the other Party notice.
12. Governing Law; Venue; Arbitration. This section of the Release shall be governed by Sections 15(d) and 15(h) of the Employment Agreement.
13. Counterparts. This Release may be executed by the Parties in any number of counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same agreement. A signature page to this Release that contains a copy of a Party's signature and that is sent by such Party or its agent with the apparent intention (as reasonably evidenced by the actions of such Party or its agent) that it constitute such Party's execution and delivery of this Release, including a document sent by facsimile transmission or by email in portable document format (.pdf), shall have the same effect as if such party had executed and delivered an original of this Release. Minor variations in the form of the signature page, including footers from earlier versions of this Release shall be disregarded in determining a Party's intent or the effectiveness of such signature.
14. No Assignment of Claims. Employee represents and agrees that Employee has not transferred or assigned, to any person or entity, any claim involving the Company, or any portion thereof or interest therein.
15. No Waiver. This Release may not be waived, modified, amended, supplemented, canceled or discharged, except by written agreement of the Parties. Failure to exercise and/or delay in exercising any right, power or privilege in this Release shall not operate as a waiver. No waiver of any breach of any provision shall be deemed to be a waiver of any preceding or succeeding breach of the same or any other provision, nor shall any waiver be implied from any course of dealing between or among the Parties.

[Remainder of page intentionally left blank. Signature page follows.]

I ACKNOWLEDGE THAT I HAVE CAREFULLY READ THE FOREGOING RELEASE, THAT I UNDERSTAND ALL OF ITS TERMS AND THAT I AM RELEASING CLAIMS AND THAT I AM ENTERING INTO IT VOLUNTARILY.

IN WITNESS WHEREOF, the parties have executed this Release as of the date and year first above written.

EMPLOYEE

Robert E. Rasmus

Address:

Email:

Date: _____

ADVANCED EMISSIONS SOLUTIONS, INC.

By: _____

Name: _____

Its: _____

Address: 8051 E. Maplewood

Suite 210

Greenwood Village, CO 80111

Attention: Human Resources



Advanced Emissions Solutions, Inc.

Advancing **Cleaner** Energy

Advanced Emissions Solutions Announces CEO Transition

Board has appointed Robert Rasmus as next Chief Executive Officer effective July 17, 2023

GREENWOOD VILLAGE, Colo., July 17, 2023 (GlobeNewswire) - Advanced Emissions Solutions, Inc. (NASDAQ: ADES) (the "Company" or "ADES"), a leader in emissions control solutions for power generation, industrial and municipal water purification markets, today announced that Mr. Robert "Bob" Rasmus has been appointed to succeed Greg Marken as the Company's President and Chief Executive Officer on July 17, 2023.

L. Spencer Wells, Chairman of the Board, commented, "On behalf of the entire Board of Directors, I want to thank Greg for his service to the Company and his leadership for the past three years. Greg took over as CEO during an uncertain time at the height of the COVID-19 pandemic, and immediately took action to strengthen our business. The signing of the master supply agreement coupled with important wins in non-Power Generation markets greatly expanded our PAC production, improved the financial profile at Red River, and diversified the markets we serve. Most recently, he navigated a complex strategic review process and laid the foundation for our future as a differentiated environmental technology company with the successful acquisition of Arq Limited. We wish Greg all the best in his future endeavors."

Mr. Wells added, "I'd also like to welcome Bob to ADES and express our confidence in his capabilities. Bob is a proven executive leader and comes to us with a wealth of experience within the broader Energy and Materials industries, as well as capital markets. His confidence in the Company and its prospects is apparent as he has elected to align his interests with shareholders and tie the majority of his compensation to the equity performance of ADES. His track record and expertise are a perfect fit to lead the next phase our growth strategy and we look forward to his leadership."

Mr. Rasmus commented, "ADES has a clear vision for its future to become a prominent environmental technology company in North America. ADES's products make the air we breathe, the water we drink, and the soil our children play on safer and healthier. ADES's products also reduce carbon and chemical emissions into the atmosphere – helping ensure a healthier world now and for future generations. The Company's unique assets and capabilities, coupled with a clearly defined capital expansion plan, provide a clear runway toward scaling our production of Granular Activated Carbon and capturing our share of the growing need for innovative purification solutions. I am looking forward to leading this team and accelerating our momentum as we execute our strategy."

Greg Marken added, "It has been a privilege to lead ADES for the past three years. I am extremely proud of our employees and what we have accomplished by leveraging the value of the Company's activated carbon assets and positioning the business for further success in the North American activated carbon market and beyond."

In connection with his appointment, Mr. Rasmus was granted the following employment inducement awards on July 17, 2023: (i) an option to purchase 1,000,000 shares of the Company's common stock at an exercise price of \$3.00 (or, if greater, the fair market value per share on the grant date), which vests ratably in three equal annual installments and (ii) 400,000 restricted stock units ("RSUs"), which vests as to 250,000 RSUs when the volume weighted average price ("VWAP") of the Company's common stock over a 30-day period equals \$10.00 per share and as to 150,000 RSUs when the VWAP over a 30-day period equals \$15.00 per share, in each case, prior to the third anniversary of Mr. Rasmus's start date. The inducement awards were granted as a material inducement to Mr. Rasmus's employment and were approved by a majority of the independent members of the Company's Board of

Directors, in accordance with Nasdaq Listing Rule 5635(c)(4). The awards were granted outside of the Company's equity incentive plans.

Additionally, Mr. Rasmus has agreed to purchase 950,000 shares of the Company's common stock for \$1,800,000, reflecting a premium over the current fair market value.

Bob Rasmus Bio

Mr. Rasmus is the founder and former Chief Executive Officer of Hi-Crush, Inc., a fully integrated provider of proppant and logistics services for hydraulic fracturing operations. He also led Hi-Crush through a successful restructuring following the unprecedented impact of the COVID-19 pandemic on the Company's operations. Prior to founding Hi-Crush, Mr. Rasmus was the Co-Founder and Managing Partner of Red Oak Capital Management. Previously, Mr. Rasmus was President of Thunderbolt Capital Corp., a venture firm focused on start-up and early-stage private equity investments. He also previously was a Senior Managing Director of Banc One Capital Markets, Inc. and a Managing Director and Head of Investment Banking in London for First Chicago Ltd. Mr. Rasmus holds a B. A. degree in Government and International Relations from the University of Notre Dame.

About Advanced Emissions Solutions, Inc.

Advanced Emissions Solutions, Inc. serves as the holding entity for a family of companies that provide emissions solutions to customers in the power generation and other industries.



ADA brings together ADA Carbon Solutions, LLC, a leading provider of powder activated carbon ("PAC") and ADA-ES, Inc., the providers of ADA® M-Prove™ Technology. We provide products and services to control mercury and other contaminants at coal-fired power generators and other industrial companies. Our broad suite of complementary products control contaminants and help our customers meet their compliance objectives consistently and reliably.



CarbPure Technologies LLC, ("CarbPure"), formed in 2015 provides high-quality PAC and granular activated carbon ideally suited for treatment of potable water and wastewater. Our affiliate company, ADA Carbon Solutions, LLC manufactures the products for CarbPure.



FluxSorb, LLC, formed in 2022, is an emerging technology company that introduces highly engineered activated carbons with a focus on the emerging remediation markets. Our vision is to partner with our customers to collaborate, develop and deploy best in class activated carbon solutions to meet even the most extreme challenges.



Arq is an environmental technology business founded in 2015 that has developed a novel process for producing specialty carbon products from coal mining waste. Arq has the technology and large-scale manufacturing facilities to produce a micro-fine hydrocarbon powder, Arq powder™, that can be used as a feedstock to produce activated carbon and as an additive for other products.

Caution on Forward-Looking Statements

Statements in this press release regarding the Company's business that are not historical facts, including statements concerning optimizing cash flows, maximizing shareholder value and Chief Executive Officer transition, are forward-looking statements that involve risks and uncertainties. For a discussion of such risks and uncertainties, which could cause actual results to differ from those contained in the forward-looking statements, see "Risk Factors" in the Company's Annual Report on Form 10-K and other filings with the Securities and Exchange Commission. The Company undertakes no duty to update publicly any forward-looking statement that it may make, whether as a result of new information, future events or otherwise, except as may be required by applicable law, regulation or other competent legal authority.

Source: Advanced Emissions Solutions, Inc.

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