

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

FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

PACIFIC ETHANOL, INC.
(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	41-2170618 (I.R.S. Employer Identification No.)
400 Capitol Mall, Suite 2060, Sacramento, California (Address of Principal Executive Offices)	95814 (Zip Code)

2016 STOCK INCENTIVE PLAN
(Full title of the plan)

Neil M. Koehler
Chief Executive Officer
Pacific Ethanol, Inc.
400 Capitol Mall, Suite 2060, Sacramento, California 95814
(Name and address of agent for service)

(916) 403-2123
(Telephone number, including area code, of agent for service)

Copies of all correspondence to:

John T. Bradley, Esq.
Christine Kim, Esq.
Troutman Sanders LLP
5 Park Plaza, Suite 1400, Irvine, California 92614
(949) 622-2700

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
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 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽²⁾	Amount of Registration Fee ⁽²⁾
Common Stock, \$0.001 par value	2,000,000	\$ 0.59	\$ 1,180,000.00	\$ 153.16

- (1) In the event of a stock split, stock dividend, or similar transaction involving the Registrant’s Common Stock, the number of shares registered hereby shall automatically be increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”).
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(h) under the Securities Act, and is based upon the average of high and low sales prices of the Registrant’s common stock on The NASDAQ Capital Market on November 5, 2019.

EXPLANATORY NOTE

Pacific Ethanol, Inc. (referred to as “we,” “us,” and through similar terms) filed the following registration statements with the Securities and Exchange Commission on Form S-8:

- Registration No. 333-212070, filed on June 16, 2016 with respect to 1,150,000 shares of our common stock relating to our 2016 Stock Incentive Plan (the “Plan”); and
- Registration No. 333-225622, filed on June 14, 2018 with respect to 2,500,000 shares of our common stock relating to our Plan.

We amended the Plan in March 2018 to increase the number of shares covered by the Plan from 1,150,000 to 3,650,000 shares of common stock. Our stockholders adopted and approved this increase at our 2018 annual meeting of stockholders held on June 14, 2018.

We further amended the Plan in April 2019 to increase the number of shares covered by the Plan from 3,650,000 shares to 5,650,000 shares of common stock. Our stockholders adopted and approved this increase at our 2019 annual meeting of stockholders held on November 7, 2019.

This Form S-8 is filed for the purpose of registering the additional 2,000,000 shares of common stock under the amended Plan.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I, Items 1 and 2, will be sent or given to each participant in accordance with Form S-8 and Rule 428(b)(1) of the Securities Act. We will furnish without charge to each participant to whom information is required to be delivered, upon written or oral request, a copy of each document incorporated by reference in Part II, Item 3 of this registration statement, which documents are incorporated by reference in the Section 10(a) prospectus, and any other documents required to be delivered to them under Rule 428(b) of the Securities Act. Requests should be directed to Pacific Ethanol, Inc., 400 Capitol Mall, Suite 2060, Sacramento, California 95814, Attention: Secretary. Our telephone number is (916) 403-2123.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

ITEM 3. Incorporation of Documents by Reference.

We incorporate the following documents by reference in this registration statement:

- Our current report on Form 8-K for November 7, 2019, as filed with the Securities and Exchange Commission on November 7, 2019;
- Our current report on Form 8-K for September 19, 2019, as filed with the Securities and Exchange Commission on September 19, 2019;
- Our quarterly report on Form 10-Q for the three months ended June 30, 2019, as filed with the Securities and Exchange Commission on August 7, 2019;
- Our current report on Form 8-K for July 31, 2019, as filed with the Securities and Exchange Commission on August 6, 2019;
- Our current report on Form 8-K for July 31, 2019, as filed with the Securities and Exchange Commission on July 31, 2019;
- Our current report on Form 8-K for July 17, 2019, as filed with the Securities and Exchange Commission on July 19, 2019;
- Our current report on Form 8-K for July 15, 2019, as filed with the Securities and Exchange Commission on July 19, 2019;
- Our current report on Form 8-K for June 20, 2019, as filed with the Securities and Exchange Commission on June 20, 2019;
- Our quarterly report on Form 10-Q for the three months ended March 31, 2019, as filed with the Securities and Exchange Commission on May 3, 2019;
- Our current report on Form 8-K for May 1, 2019 as filed with the Securities and Exchange Commission on May 1, 2019;

- Our annual report on Form 10-K/A for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on April 29, 2019;
- Our current report on Form 8-K for March 21, 2019, as filed with the Securities and Exchange Commission on March 27, 2019;
- Our annual report on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on March 18, 2019;
- Our current report on Form 8-K for March 12, 2019, as filed with the Securities and Exchange Commission on March 12, 2019; and
- The description of our capital stock contained in our Current Report on Form 8-K filed with the Securities and Exchange Commission on April 13, 2017.

All reports and other documents we subsequently file after the date of this registration statement under Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), prior to the filing of a post-effective amendment which indicates that all securities offered under this registration statement have been sold, or which deregisters all securities then remaining unsold, shall be deemed incorporated by reference into this registration statement and shall be a part of this registration statement from the date of filing such documents.

For purposes of this registration statement, any document or any statement contained in a document incorporated or deemed to be incorporated herein by reference shall be deemed to be modified or superseded to the extent that a subsequently filed document or a statement contained herein or in any other subsequently filed document, which also is or is deemed to be incorporated herein by reference modifies or supersedes such document or such statement in such document. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Notwithstanding the above, information that is “furnished to” the Securities and Exchange Commission shall not be deemed “filed with” the Securities and Exchange Commission and shall not be deemed incorporated by reference into this registration statement.

ITEM 4. Description of Securities.

Not applicable.

ITEM 5. Interests of Named Experts and Counsel.

Not applicable.

ITEM 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law (“DGCL”) permits a corporation to indemnify its directors and officers against expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with a pending or completed action, suit or proceeding if the officer or director acted in good faith and in a manner the officer or director reasonably believed to be in the best interests of the corporation.

Our certificate of incorporation provides that, except in certain specified instances, our directors shall not be personally liable to us or our stockholders for monetary damages for breach of their fiduciary duty as directors, except liability for the following:

- any breach of their duty of loyalty to Pacific Ethanol or our stockholders;
- acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DGCL; and
- any transaction from which the director derived an improper personal benefit.

In addition, our certificate of incorporation and bylaws obligate us to indemnify our directors and officers against expenses and other amounts reasonably incurred in connection with any proceeding arising from the fact that such person is or was an agent of ours. Our bylaws also authorize us to purchase and maintain insurance on behalf of any of our directors or officers against any liability asserted against that person in that capacity, whether or not we would have the power to indemnify that person under the provisions of the DGCL. We have entered and expect to continue to enter into agreements to indemnify our directors and officers as determined by our board of directors. These agreements provide for indemnification of related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees regarding which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons under the foregoing provisions of our certificate of incorporation or bylaws, or otherwise, we have been informed that in the opinion of the Securities and Exchange Commission, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

ITEM 7. Exemption from Registration Claimed.

Not Applicable.

ITEM 8. Exhibits.

Exhibit Number	Description	Incorporation by Reference				
		Form	File Number	Exhibit Number	Filing Date	Filed Herewith
4.1	Certificate of Incorporation	10-Q	000-21467	3.1	11/06/2015	
4.2	Certificate of Designations, Powers, Preferences and Rights of the Series A Cumulative Redeemable Convertible Preferred Stock	10-Q	000-21467	3.2	11/06/2015	
4.3	Certificate of Designations, Powers, Preferences and Rights of the Series B Cumulative Convertible Preferred Stock	10-Q	000-21467	3.3	11/06/2015	
4.4	Certificate of Amendment to Certificate of Incorporation dated June 3, 2010	10-Q	000-21467	3.4	11/06/2015	
4.5	Certificate of Amendment to Certificate of Incorporation dated June 8, 2011	10-Q	000-21467	3.5	11/06/2015	
4.6	Certificate of Amendment to Certificate of Incorporation dated May 14, 2013	10-Q	000-21467	3.6	11/06/2015	
4.7	Certificate of Amendment to Certificate of Incorporation dated July 1, 2015	10-Q	000-21467	3.7	11/06/2015	
4.8	Amended and Restated Bylaws	10-Q	000-21467	3.1	11/12/2014	
4.9	Specimen Common Stock Certificate	S-3	333-217323	4.9	04/14/2017	
4.10	2016 Stock Incentive Plan (as amended through November 7, 2019)					X
4.11	Form of Employee Restricted Stock Agreement under 2016 Stock Incentive Plan	10-K	000-21467	10.5	03/15/2018	
4.12	Form of Non-Employee Director Restricted Stock Agreement under 2016 Stock Incentive Plan	10-K	000-21467	10.6	03/15/2017	
5.1	Opinion of Troutman Sanders LLP					X
23.1	Consent of Troutman Sanders LLP (contained in Exhibit 5.1)					X
23.2	Consent of Independent Registered Public Accounting Firm					X
24.1	Power of Attorney (contained on the signature page to this registration statement)					X

ITEM 9. Undertakings.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to the registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

Provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those clauses is contained in periodic reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference into the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions summarized in Item 6 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

PACIFIC ETHANOL, INC.
2016 STOCK INCENTIVE PLAN
(As Amended Through November 7, 2019)

ARTICLE ONE
GENERAL PROVISIONS

I. Purpose of the Plan

This 2016 Stock Incentive Plan is intended to promote the interests of Pacific Ethanol, Inc. by providing eligible persons in the Corporation's service with the opportunity to acquire a proprietary or economic interest, or otherwise increase their proprietary or economic interest, in the Corporation as an incentive for them to remain in such service and render superior performance during such service. Capitalized terms not otherwise defined herein shall have the meanings assigned to such terms in the attached Appendix.

II. Structure of the Plan

A. The Plan is divided into two equity-based incentive programs:

- the Discretionary Grant Program, under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of common stock or stock appreciation rights tied to the value of such common stock; and
- the Stock Issuance Program, under which eligible persons may be issued shares of common stock pursuant to restricted stock or restricted stock unit awards or other stock-based awards, made by and at the discretion of the Plan Administrator, that vest upon the completion of a designated service period and/or the attainment of pre-established performance milestones, or under which shares of common stock may be issued through direct purchase or as a bonus for services rendered to the Corporation (or any Parent or Subsidiary).

B. The provisions of Articles One and Four shall apply to all equity programs under the Plan and shall govern the interests of all persons under the Plan.

III. Administration of the Plan

A. The Compensation Committee shall have sole and exclusive authority to administer the Discretionary Grant and Stock Issuance Programs, provided, however, that the Board may retain, reassume or exercise from time to time the power to administer those programs with respect to all persons. However, any discretionary Awards to members of the Compensation Committee must be authorized and approved by a disinterested majority of the Board.

B. The Plan Administrator shall, within the scope of its administrative functions under the Plan, have full power and authority (subject to the provisions of the Plan) to establish such rules and regulations as it may deem appropriate for proper administration of the Discretionary Grant and Stock Issuance Programs and to make such determinations under, and issue such interpretations of, the provisions of those programs and any outstanding Awards thereunder as it may deem necessary or advisable. Decisions of the Plan Administrator within the scope of its administrative functions under the Plan shall be final and binding on all parties who have an interest in the Discretionary Grant and Stock Issuance Programs under its jurisdiction or any Award thereunder.

C. Service on the Compensation Committee shall constitute service as a Board member, and members of each such committee shall accordingly be entitled to full indemnification and reimbursement as Board members for their service on such committee. No member of the Compensation Committee shall be liable for any act or omission made in good faith with respect to the Plan or any Award under the Plan.

IV. Eligibility.

A. The persons eligible to participate in the Discretionary Grant and Stock Issuance Programs are as follows:

- (i) Employees;
- (ii) non-employee members of the Board or the board of directors of any Parent or Subsidiary; and
- (iii) Consultants.

B. The Plan Administrator shall, within the scope of its administrative jurisdiction under the Plan, have full authority to determine (i) with respect to Awards made under the Discretionary Grant Program, which eligible persons are to receive such Awards, the time or times when those Awards are to be made, the number of shares to be covered by each such Award, the status of any awarded option as either an Incentive Option or a Non-Statutory Option, the exercise price per share in effect for each Award (subject to the limitations set forth in Article Two), the time or times when each Award is to vest and become exercisable, subject to a minimum initial vesting period of one (1) year, and the maximum term for which the Award is to remain outstanding, and (ii) with respect to Awards under the Stock Issuance Program, which eligible persons are to receive such Awards, the time or times when the Awards are to be made, the number of shares subject to each such Award, the vesting schedule (if any) applicable to the shares subject to such Award, subject to a minimum initial vesting period of one (1) year, and the cash consideration (if any) payable for such shares.

C. The Plan Administrator shall have the absolute discretion to grant options or stock appreciation rights in accordance with the Discretionary Grant Program and to effect stock issuances or other stock-based awards in accordance with the Stock Issuance Program.

V. Stock Subject to the Plan

A. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired common stock, including shares repurchased by the Corporation on the open market. Subject to any additional shares authorized by the vote of the Board and approved by the stockholders, the number of shares of common stock reserved for issuance over the term of the Plan shall not exceed 5,650,000 shares. Any or all of the shares of common stock reserved for issuance under the Plan shall be authorized for issuance pursuant to Incentive Options or other Awards.

B. No one person participating in the Plan may be granted Awards of common stock having a Fair Market Value on the applicable grant date(s) of more than One Million Dollars (\$1,000,000) in the aggregate per calendar year.

C. Shares of common stock subject to outstanding Awards under the Plan shall in no event become eligible for reissuance under the Plan, whether as a result of expiration or termination of an Award, cancellation or repurchase of unvested shares, tender of shares in connection with a net/cashless exercise program, withholding of shares to cover withholding taxes, or otherwise.

D. If any change is made to the common stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding common stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made by the Plan Administrator to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year, (iii) the number and/or class of securities and the exercise or base price per share (or any other cash consideration payable per share) in effect under each outstanding Award under the Discretionary Grant Program, and (iv) the number and/or class of securities subject to each outstanding Award under the Stock Issuance Program and the cash consideration (if any) payable per share thereunder. To the extent such adjustments are to be made to outstanding Awards, those adjustments shall be effected in a manner that shall preclude the enlargement or dilution of rights and benefits under those Awards. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

VI. Clawback Policy.

The Plan Administrator shall, notwithstanding anything to the contrary contained in any Award document or in any employment or other agreement, have full power and authority, and is required, to terminate any vested or unvested Award or require repayment to the Corporation of the proceeds received by a participant arising from any Award, to apply the Corporation's Policy for Recoupment of Incentive Compensation dated March 29, 2018, as such policy may be amended by the Corporation from time to time, or any successor "clawback" or similar policy adopted by the Corporation, including any such policy or policy changes mandated by or implemented pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act or the applicable listing requirements or rules and regulations of The NASDAQ Capital Market, if applicable, and any other stock exchange or other market on which common stock is then quoted or listed for trading.

ARTICLE TWO **DISCRETIONARY GRANT PROGRAM**

I. Option Terms.

Each option shall be evidenced by one or more documents in the form approved by the Plan Administrator; provided, however, that each such document shall comply with the terms specified below. Each document evidencing an Incentive Option shall, in addition, be subject to the provisions of the Plan applicable to such options.

A. Exercise Price.

1. The exercise price per share shall be fixed by the Plan Administrator but shall not be less than 85% of the Fair Market Value per share of common stock on the option grant date.

2. The exercise price shall become immediately due upon exercise of the option and shall be payable in one or more of the following forms that the Plan Administrator may deem appropriate in each individual instance:

(i) cash or check made payable to the Corporation;

(ii) shares of common stock valued at Fair Market Value on the Exercise Date and held for the period (if any) necessary to avoid any additional charges to the Corporation's earnings for financial reporting purposes; or

(iii) to the extent the option is exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable instructions to (a) a brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable federal, state and local income and employment taxes required to be withheld by the Corporation by reason of such exercise and (b) the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm to complete the sale.

Except to the extent such sale and remittance procedure is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. Exercise and Term of Options. Each option shall be exercisable at such time or times, during such period and for such number of shares as shall be determined by the Plan Administrator and set forth in the documents evidencing the option. However, no option shall have a term in excess of ten years measured from the option grant date.

C. Effect of Termination of Service

1. The following provisions shall govern the exercise of any options held by the Optionee at the time of cessation of Service or death:

(i) Any option outstanding at the time of the Optionee's cessation of Service for any reason shall remain exercisable for such period of time thereafter as shall be determined by the Plan Administrator and set forth in the documents evidencing the option or as otherwise specifically authorized by the Plan Administrator in its sole discretion pursuant to an express written agreement with Optionee, but no such option shall be exercisable after the expiration of the option term.

(ii) Any option held by the Optionee at the time of death and exercisable in whole or in part at that time may be subsequently exercised by the personal representative of the Optionee's estate or by the person or persons to whom the option is transferred pursuant to the Optionee's will or the laws of inheritance or by the Optionee's designated beneficiary or beneficiaries of that option.

(iii) During the applicable post-Service exercise period, the option may not be exercised in the aggregate for more than the number of vested shares for which that option is at the time exercisable. No additional shares shall vest under the option following the Optionee's cessation of Service, except to the extent (if any) specifically authorized by the Plan Administrator in its sole discretion pursuant to an express written agreement with Optionee. Upon the expiration of the applicable exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding for any shares for which the option has not been exercised.

2. The Plan Administrator shall have complete discretion, exercisable either at the time an option is granted or at any time while the option remains outstanding, to:

(i) extend the period of time for which the option is to remain exercisable following the Optionee's cessation of Service from the limited exercise period otherwise in effect for that option to such greater period of time as the Plan Administrator shall deem appropriate, but in no event beyond the expiration of the option term, and/or

(ii) permit the option to be exercised, during the applicable post-Service exercise period, not only with respect to the number of vested shares of common stock for which such option is exercisable at the time of the Optionee's cessation of Service but also with respect to one or more additional installments in which the Optionee would have vested had the Optionee continued in Service.

D. **Stockholder Rights.** The holder of an option shall have no stockholder rights with respect to the shares subject to the option until such person shall have exercised the option, paid the exercise price and become a holder of record of the purchased shares.

E. **Repurchase Rights.** The Plan Administrator shall have the discretion to grant options that are exercisable for unvested shares of common stock. Should the Optionee cease Service while holding such unvested shares, the Corporation shall have the right to repurchase, at the exercise price paid per share, any or all of those unvested shares. The terms upon which such repurchase right shall be exercisable (including the period and procedure for exercise and the appropriate vesting schedule for the purchased shares) shall be established by the Plan Administrator and set forth in the document evidencing such repurchase right.

F. **Transferability of Options.** The transferability of options granted under the Plan shall be governed by the following provisions:

(i) **Incentive Options.** During the lifetime of the Optionee, Incentive Options shall be exercisable only by the Optionee and shall not be assignable or transferable other than by will or the laws of inheritance following the Optionee's death.

(ii) **Non-Statutory Options.** Non-Statutory Options shall be subject to the same limitation on transfer as Incentive Options, except that the Plan Administrator may structure one or more Non-Statutory Options so that the option may be assigned in whole or in part during the Optionee's lifetime to one or more Family Members of the Optionee or to a trust established exclusively for the Optionee and/or one or more such Family Members, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the option pursuant to the assignment. The terms applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate.

(iii) **Beneficiary Designations.** Notwithstanding the foregoing, the Optionee may designate one or more persons as the beneficiary or beneficiaries of his or her outstanding options under this Article Two (whether Incentive Options or Non-Statutory Options), and those options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

II. Incentive Options.

The terms specified below, together with any additions, deletions or changes thereto imposed from time to time pursuant to the provisions of the Code governing Incentive Options, shall be applicable to all Incentive Options. Except as modified by the provisions of this Section II, all the provisions of Articles One, Two and Four shall be applicable to Incentive Options. Options that are specifically designated as Non-Statutory Options when issued under the Plan shall not be subject to the terms of this Section II.

A. **Eligibility.** Incentive Options may only be granted to Employees.

B. **Exercise Price.** The exercise price per share shall not be less than 100% of the Fair Market Value per share of common stock on the option grant date.

C. **Dollar Limitation.** The aggregate Fair Market Value of the shares of common stock (determined as of the respective date or dates of grant) for which one or more options granted to any Employee under the Plan (or any other option plan of the Corporation or any Parent or Subsidiary) may for the first time become exercisable as Incentive Options during any one calendar year shall not exceed the sum of One Hundred Thousand Dollars (\$100,000). To the extent the Employee holds two or more such options which become exercisable for the first time in the same calendar year, then for purposes of the foregoing limitation on the exercisability of those options as Incentive Options, such options shall be deemed to become first exercisable in that calendar year on the basis of the chronological order in which they were granted, except to the extent otherwise provided under applicable law or regulation.

D. **10% Stockholder.** If any Employee to whom an Incentive Option is granted is a 10% Stockholder, then the exercise price per share shall not be less than 110% of the Fair Market Value per share of common stock on the option grant date, and the option term shall not exceed five years measured from the option grant date.

III. Stock Appreciation Rights.

A. **Authority.** The Plan Administrator shall have full power and authority, exercisable in its sole discretion, to grant stock appreciation rights in accordance with this Section III to selected Optionees or other individuals eligible to receive option grants under the Discretionary Grant Program.

B. **Types.** Three types of stock appreciation rights shall be authorized for issuance under this Section III: (i) tandem stock appreciation rights ("Tandem Rights"), (ii) standalone stock appreciation rights ("Standalone Rights") and (iii) limited stock appreciation rights ("Limited Rights").

C. **Tandem Rights.** The following terms and conditions shall govern the grant and exercise of Tandem Rights.

1. One or more Optionees may be granted a Tandem Right, exercisable upon such terms and conditions as the Plan Administrator may establish, to elect between the exercise of the underlying stock option for shares of common stock or the surrender of that option in exchange for a distribution from the Corporation in an amount equal to the excess of (i) the Fair Market Value (on the option surrender date) of the number of shares in which the Optionee is at the time vested under the surrendered option (or surrendered portion thereof) over (ii) the aggregate exercise price payable for such vested shares.

2. No such option surrender shall be effective unless it is approved by the Plan Administrator, either at the time of the actual option surrender or at any earlier time. If the surrender is so approved, then the distribution to which the Optionee shall accordingly become entitled under this Section III may be made in shares of common stock valued at Fair Market Value on the option surrender date, in cash, or partly in shares and partly in cash, as the Plan Administrator shall in its sole discretion deem appropriate.

3. If the surrender of an option is not approved by the Plan Administrator, then the Optionee shall retain whatever rights the Optionee had under the surrendered option (or surrendered portion thereof) on the option surrender date and may exercise such rights at any time prior to the later of (i) five business days after the receipt of the rejection notice or (ii) the last day on which the option is otherwise exercisable in accordance with the terms of the instrument evidencing such option, but in no event may such rights be exercised more than ten years after the date of the option grant.

D. **Standalone Rights.** The following terms and conditions shall govern the grant and exercise of Standalone Rights under this Article Two:

1. One or more individuals eligible to participate in the Discretionary Grant Program may be granted a Standalone Right not tied to any underlying option under this Discretionary Grant Program. The Standalone Right shall relate to a specified number of shares of common stock and shall be exercisable upon such terms and conditions as the Plan Administrator may establish. In no event, however, may the Standalone Right have a maximum term in excess of ten years measured from the grant date. Upon exercise of the Standalone Right, the holder shall be entitled to receive a distribution from the Corporation in an amount equal to the excess of (i) the aggregate Fair Market Value (on the exercise date) of the shares of common stock underlying the exercised right over (ii) the aggregate base price in effect for those shares.

2. The number of shares of common stock underlying each Standalone Right and the base price in effect for those shares shall be determined by the Plan Administrator in its sole discretion at the time the Standalone Right is granted. In no event, however, may the base price per share be less than the Fair Market Value per underlying share of common stock on the grant date.

3. Standalone Rights shall be subject to the same transferability restrictions applicable to Non-Statutory Options and may not be transferred during the holder's lifetime, except to one or more Family Members of the holder or to a trust established exclusively for the holder and/or such Family Members, to the extent such assignment is in connection with the holder's estate plan or pursuant to a domestic relations order covering the Standalone Right as marital property. In addition, one or more beneficiaries may be designated for an outstanding Standalone Right in accordance with substantially the same terms and provisions as set forth in Section I.F of this Article Two.

4. The distribution with respect to an exercised Standalone Right may be made in shares of common stock valued at Fair Market Value on the exercise date, in cash, or partly in shares and partly in cash, as the Plan Administrator shall in its sole discretion deem appropriate.

5. The holder of a Standalone Right shall have no stockholder rights with respect to the shares subject to the Standalone Right unless and until such person shall have exercised the Standalone Right and become a holder of record of shares of common stock issued upon the exercise of such Standalone Right.

E. **Limited Rights.** The following terms and conditions shall govern the grant and exercise of Limited Rights under this Article Two:

1. One or more Section 16 Insiders may, in the Plan Administrator's sole discretion, be granted Limited Rights with respect to their outstanding options under this Article Two.

2. Upon the occurrence of a Hostile Take-Over, the Section 16 Insider shall have the unconditional right (exercisable for a 30-day period following such Hostile Take-Over) to surrender each option with such a Limited Right to the Corporation. The Section 16 Insider shall in return be entitled to a cash distribution from the Corporation in an amount equal to the excess of (i) the Take-Over Price of the number of shares in which the Optionee is at the time vested under the surrendered option (or surrendered portion thereof) over (ii) the aggregate exercise price payable for those vested shares. Such cash distribution shall be made within five days following the option surrender date.

3. The Plan Administrator shall pre-approve, at the time such Limited Right is granted, the subsequent exercise of that right in accordance with the terms of the grant and the provisions of this Section III. No additional approval of the Plan Administrator or the Board shall be required at the time of the actual option surrender and cash distribution. Any unsurrendered portion of the option shall continue to remain outstanding and become exercisable in accordance with the terms of the instrument evidencing such grant.

F. **Post-Service Exercise.** The provisions governing the exercise of Tandem, Standalone and Limited Stock Appreciation Rights following the cessation of the recipient's Service or the recipient's death shall be substantially the same as those set forth in Section I.C of this Article Two for the options granted under the Discretionary Grant Program.

IV. Change in Control/ Hostile Take-Over.

A. No Award outstanding under the Discretionary Grant Program at the time of a Change in Control shall vest and become exercisable on an accelerated basis if and to the extent that: (i) such Award is, in connection with the Change in Control, assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction, (ii) such Award is replaced with a cash retention program of the successor corporation that preserves the spread existing at the time of the Change in Control on the shares of common stock as to which the Award is not otherwise at that time vested and exercisable and provides for subsequent payout of that spread in accordance with the same exercise/vesting schedule applicable to those shares, or (iii) the acceleration of such Award is subject to other limitations imposed by the Plan Administrator. However, if none of the foregoing conditions are satisfied, each Award outstanding under the Discretionary Grant Program at the time of the Change in Control but not otherwise vested and exercisable as to all the shares at the time subject to that Award shall automatically accelerate so that each such Award shall, immediately prior to the effective date of the Change in Control, vest and become exercisable as to all the shares of common stock at the time subject to that Award and may be exercised as to any or all of those shares as fully vested shares of common stock.

B. All outstanding repurchase rights under the Discretionary Grant Program shall also terminate automatically, and the shares of common stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control, except to the extent: (i) those repurchase rights are assigned to the successor corporation (or parent thereof) or otherwise continue in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator.

C. Immediately following the consummation of the Change in Control, all outstanding Awards under the Discretionary Grant Program shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise expressly continued in full force and effect pursuant to the terms of the Change in Control transaction.

D. Each option that is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities that would have been issuable to the Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control. In the event outstanding Standalone Rights are to be assumed in connection with a Change in Control transaction or otherwise continued in effect, the shares of common stock underlying each such Standalone Right shall be adjusted immediately after such Change in Control to apply to the number and class of securities into which those shares of common stock would have been converted in consummation of such Change in Control had those shares actually been outstanding at that time. Appropriate adjustments to reflect such Change in Control shall also be made to (i) the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same, (ii) the base price per share in effect under each outstanding Standalone Right, provided the aggregate base price shall remain the same, (iii) the maximum number and/or class of securities available for issuance over the remaining term of the Plan, and (iv) the maximum number and/or class of securities for which any one person may be granted Awards under the Plan per calendar year. To the extent the actual holders of the Corporation's outstanding common stock receive cash consideration for their common stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption or continuation of the outstanding Awards under the Discretionary Grant Program, substitute, for the securities underlying those assumed Awards, one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of common stock in such Change in Control transaction.

E. The Plan Administrator shall have full power and authority to structure one or more outstanding Awards under the Discretionary Grant Program so that those Awards shall immediately vest and become exercisable as to all of the shares at the time subject to those Awards in the event the Optionee's Service is subsequently terminated by reason of an Involuntary Termination within a designated period (not to exceed 18 months) following the effective date of any Change in Control or a Hostile Take-Over in which those Awards do not otherwise vest on an accelerated basis. Any Awards so accelerated shall remain exercisable as to fully vested shares until the expiration or sooner termination of their term.

F. The portion of any Incentive Option accelerated in connection with a Change in Control shall remain exercisable as an Incentive Option only to the extent the applicable One Hundred Thousand Dollar (\$100,000) limitation is not exceeded. To the extent such dollar limitation is exceeded, the accelerated portion of such option shall be exercisable as a Non-Statutory Option under the federal tax laws.

G. Awards outstanding under the Discretionary Grant Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

ARTICLE THREE
STOCK ISSUANCE PROGRAM

I. Stock Issuance Terms.

A. **Issuances.** Shares of common stock may be issued under the Stock Issuance Program through direct and immediate issuances without any intervening option grants. Each such stock issuance shall be evidenced by a Stock Issuance Agreement that complies with the terms specified below. Shares of common stock may also be issued under the Stock Issuance Program pursuant to restricted stock awards or restricted stock units, awarded by and at the discretion of the Plan Administrator, that entitle the recipients to receive the shares underlying those awards or units upon the attainment of designated performance goals and/or the satisfaction of specified Service requirements or upon the expiration of a designated time period following the vesting, subject to a minimum initial vesting period of one (1) year, of those awards or units.

B. Issue Price.

1. The price per share at which shares of common stock may be issued under the Stock Issuance Program shall be fixed by the Plan Administrator, but shall not be less than 100% of the Fair Market Value per share of common stock on the issuance date.

2. Shares of common stock may be issued under the Stock Issuance Program for any of the following items of consideration that the Plan Administrator may deem appropriate in each individual instance:

- (i) cash or check made payable to the Corporation;
- (ii) past services rendered to the Corporation (or any Parent or Subsidiary); or
- (iii) any other valid form of consideration permissible under the Delaware Corporations Code at the time such shares are issued.

C. Vesting Provisions.

1. Shares of common stock issued under the Stock Issuance Program may, in the discretion of the Plan Administrator, vest in one or more installments over the Participant's period of Service, subject to a minimum initial vesting period of one (1) year, and/or upon attainment of specified performance objectives. The elements of the vesting schedule applicable to any unvested shares of common stock issued under the Stock Issuance Program shall be determined by the Plan Administrator and incorporated into the Stock Issuance Agreement. Shares of common stock may also be issued under the Stock Issuance Program pursuant to restricted stock awards or restricted stock units that entitle the recipients to receive the shares underlying those awards and/or units upon the attainment of designated performance goals or the satisfaction of specified Service requirements or upon the expiration of a designated time period, subject to a minimum initial vesting period of one (1) year, following the vesting of those awards or units, including (without limitation) a deferred distribution date following the termination of the Participant's Service.

2. The Plan Administrator shall also have the discretionary authority, consistent with Code Section 162(m), to structure one or more Awards under the Stock Issuance Program so that the shares of common stock subject to those Awards shall vest (or vest and become issuable) upon the achievement of certain pre-established corporate performance goals based on one or more of the following criteria: (i) return on total stockholders' equity; (ii) net income per share of common stock; (iii) net income or operating income; (iv) earnings before interest, taxes, depreciation, amortization and stock-compensation costs, or operating income before depreciation and amortization; (v) sales or revenue targets; (vi) return on assets, capital or investment; (vii) cash flow; (viii) market share; (ix) cost reduction goals; (x) budget comparisons; (xi) implementation or completion of projects or processes strategic or critical to the Corporation's business operations; (xii) measures of customer satisfaction; (xiii) any combination of, or a specified increase in, any of the foregoing; and (xiv) the formation of joint ventures, research and development collaborations, marketing or customer service collaborations, or the completion of other corporate transactions intended to enhance the Corporation's revenue or profitability or expand its customer base; provided, however, that for purposes of items (ii), (iii) and (vii) above, the Plan Administrator may, at the time the Awards are made, specify certain adjustments to such items as reported in accordance with generally accepted accounting principles in the U.S. ("GAAP"), which will exclude from the calculation of those performance goals one or more of the following: certain charges related to acquisitions, stock-based compensation, employer payroll tax expense on certain stock option exercises, settlement costs, restructuring costs, gains or losses on strategic investments, non-operating gains or losses, certain other non-cash charges, valuation allowance on deferred tax assets, and the related income tax effects, purchases of property and equipment, and any extraordinary non-recurring items as described in Accounting Principles Board Opinion No. 30 or its successor, provided that such adjustments are in conformity with those reported by the Corporation on a non-GAAP basis. In addition, such performance goals may be based upon the attainment of specified levels of the Corporation's performance under one or more of the measures described above relative to the performance of other entities and may also be based on the performance of any of the Corporation's business groups or divisions thereof or any Parent or Subsidiary. Performance goals may include a minimum threshold level of performance below which no award will be earned, levels of performance at which specified portions of an award will be earned, and a maximum level of performance at which an award will be fully earned. The Plan Administrator may provide that, if the actual level of attainment for any performance objective is between two specified levels, the amount of the award attributable to that performance objective shall be interpolated on a straight-line basis.

3. Any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) that the Participant may have the right to receive with respect to the Participant's unvested shares of common stock by reason of any stock dividend, stock split, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding common stock as a class without the Corporation's receipt of consideration shall be issued subject to (i) the same vesting requirements applicable to the Participant's unvested shares of common stock and (ii) such escrow arrangements as the Plan Administrator shall deem appropriate.

4. The Participant shall have full stockholder rights with respect to any shares of common stock issued to the Participant under the Stock Issuance Program, whether or not the Participant's interest in those shares is vested; provided, however, that the Corporation shall withhold and retain any dividends on unvested shares until such time as the shares vest, if at all, and shall thereafter promptly pay to the Participant any such dividends withheld and retained or, if the shares do not vest, return any such dividends to the corporate treasury. Accordingly, the Participant shall have the right to vote all such shares but shall not receive any cash dividends paid on any unvested shares unless and until the shares vest. The Participant shall not have any stockholder rights with respect to the shares of common stock subject to a restricted stock unit award until that award vests and the shares of common stock are actually issued thereunder. However, dividend-equivalent units may be paid or credited, either in cash or in actual or phantom shares of common stock, on outstanding restricted stock unit or restricted stock awards, subject to such terms and conditions as the Plan Administrator may deem appropriate and subject to the withholding and retention of dividends with respect to any unvested awards on the same terms as set forth above.

5. Should the Participant cease to remain in Service while holding one or more unvested shares of common stock issued under the Stock Issuance Program or should the performance objectives not be attained with respect to one or more such unvested shares of common stock, then except as set forth in Section I.C.6 of this Article Three, those shares shall be immediately surrendered to the Corporation for cancellation, and the Participant shall have no further stockholder rights with respect to those shares. To the extent the surrendered shares were previously issued to the Participant for consideration paid in cash, cash equivalent or otherwise, the Corporation shall repay to the Participant the same amount and form of consideration as the Participant paid for the surrendered shares.

6. In the event of the Participant's retirement, the Plan Administrator may in its discretion waive the surrender and cancellation of one or more unvested shares of common stock that would otherwise occur upon the cessation of the Participant's Service. Any such waiver shall result in the immediate vesting of the Participant's interest in the shares of common stock as to which the waiver applies. Such waiver may be effected at any time, whether before or after the Participant's cessation of Service as a result of the Participant's retirement. No vesting requirements tied to the attainment of performance objectives may be waived with respect to shares that were intended at the time of issuance to qualify as performance-based compensation under Code Section 162(m), except in the event of the Participant's Involuntary Termination or as otherwise provided in Section II.E of this Article Three.

7. Outstanding restricted stock awards or restricted stock units under the Stock Issuance Program shall automatically terminate, and no shares of common stock shall actually be issued in satisfaction of those awards or units, if the performance goals or Service requirements established for such awards or units are not attained or satisfied.

II. Change in Control/ Hostile Take-Over.

A. All of the Corporation's outstanding repurchase rights under the Stock Issuance Program shall terminate automatically, and all the shares of common stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control, except to the extent (i) those repurchase rights are to be assigned to the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the express terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed in the Stock Issuance Agreement.

B. Each outstanding Award under the Stock Issuance Program that is assumed in connection with a Change in Control or otherwise continued in effect shall be adjusted immediately after the consummation of that Change in Control to apply to the number and class of securities into which the shares of common stock subject to the Award immediately prior to the Change in Control would have been converted in consummation of such Change in Control had those shares actually been outstanding at that time, and appropriate adjustments shall also be made to the cash consideration (if any) payable per share thereunder, provided the aggregate amount of such consideration shall remain the same. If any such Award is not so assumed or otherwise continued in effect or replaced with a cash retention program which preserves the Fair Market Value of the shares underlying the Award at the time of the Change in Control and provides for the subsequent payout of that value in accordance with the vesting schedule in effect for the Award at the time of such Change in Control, such Award shall vest, and the shares of common stock subject to that Award shall be issued as fully-vested shares, immediately prior to the consummation of the Change in Control.

C. The Plan Administrator shall have full power and authority to structure one or more outstanding Awards under the Stock Issuance Program so that the shares of common stock subject to those Awards shall immediately vest (or vest and become issuable) as to all of the shares at the time subject to those Awards in the event the Participant's Service is subsequently terminated by reason of an Involuntary Termination within a designated period (not to exceed 18 months) following the effective date of any Change in Control or a Hostile Take-Over in which those Awards do not otherwise vest on an accelerated basis.

D. The Plan Administrator's authority under Paragraph C of this Section II shall also extend to any Award intended to qualify as performance-based compensation under Code Section 162(m), even though the automatic vesting of those Awards pursuant to Paragraph C of this Section II may result in their loss of performance-based status under Code Section 162(m).

E. Awards outstanding under the Stock Issuance Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

ARTICLE FOUR **MISCELLANEOUS**

I. Tax Withholding.

A. The Corporation's obligation to deliver shares of common stock upon the issuance, exercise or vesting of Awards under the Plan shall be subject to the satisfaction of all applicable federal, state and local income and employment tax withholding requirements.

B. Subject to applicable laws, rules and regulations and policies of the Corporation, the Plan Administrator may, in its discretion, provide any or all Optionees or Participants to whom Awards are made under the Plan with the right to utilize any or all of the following methods to satisfy all or part of the Withholding Taxes to which those holders may become subject in connection with the issuance, exercise or vesting of those Awards.

(i) Stock Withholding: The election to have the Corporation withhold, from the shares of common stock otherwise issuable upon the issuance, exercise or vesting of those Awards a portion of those shares with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed 100%) designated by the Optionee or Participant and make a cash payment equal to such Fair Market Value directly to the appropriate taxing authorities on such individual's behalf.

(ii) Stock Delivery: The election to deliver to the Corporation, at the time the Award is issued, exercised or vests, one or more shares of common stock previously acquired by such the Optionee or Participant (other than in connection with the issuance, exercise or vesting triggering the Withholding Taxes) with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed 100%) designated by such holder. The shares of common stock so delivered shall not be added to the shares of common stock authorized for issuance under the Plan.

(iii) *Sale and Remittance*: The election to deliver to the Corporation, to the extent the Award is issued or exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee or Participant shall concurrently provide irrevocable instructions to a brokerage firm to effect the immediate sale of the purchased or issued shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the Withholding Taxes required to be withheld by the Corporation by reason of such issuance, exercise or vesting.

II. Share Escrow/Legends.

Unvested shares issued under the Plan may, in the Plan Administrator's discretion, be held in escrow by the Corporation until the Participant's interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing those unvested shares.

III. Effective Date and Term of the Plan.

A. The Plan was initially adopted by the Board on March 25, 2016 and ratified and approved by the Corporation's stockholders on June 16, 2016. The Plan was amended by the Board on March 29, 2018, which was ratified and approved by the Corporation's stockholders on June 14, 2018, to increase the number of shares authorized for issuance under the Plan from 1,150,000 shares to 3,650,000 shares and to implement other updates. The Plan was further amended by the Board on April 5, 2019, subject to stockholder approval, to increase the number of shares authorized for issuance under the Plan from 3,650,000 shares to 5,650,000 shares and to implement other updates.

B. The Plan shall become effective on the Plan Effective Date. Awards may be granted under the Discretionary Grant Program and the Stock Issuance Program at any time on or after the Plan Effective Date.

C. The Plan shall terminate upon the earliest to occur of (i) March 25, 2026, (ii) the date on which all shares available for issuance under the Plan shall have been issued as fully-vested shares, (iii) the termination of all outstanding Awards in connection with a Change in Control, or (iv) such other date as the Board in its sole discretion terminates the Plan. If the Plan terminates on March 25, 2026 or on such other date as the Board terminates the Plan, then all Awards outstanding at that time shall continue to have force and effect in accordance with the provisions of the documents evidencing such Awards.

IV. Amendment, Suspension or Termination of the Plan

The Board may suspend or terminate the Plan at any time, without notice, and in its sole discretion. The Board shall have complete and exclusive power and authority to amend or modify the Plan in any or all respects. However, no such amendment or modification shall materially impair the rights and obligations with respect to Awards at the time outstanding under the Plan unless the Optionee or the Participant consents to such amendment or modification. In addition, stockholder approval will be required for any amendment to the Plan that (i) materially increases the number of shares of common stock available for issuance under the Plan, (ii) materially expands the class of individuals eligible to receive option grants or other awards under the Plan, (iii) materially increases the benefits accruing to the Optionees and Participants under the Plan or materially reduces the price at which shares of common stock may be issued or purchased under the Plan, (iv) materially extends the term of the Plan, (v) expands the types of awards available for issuance under the Plan, or (vi) is required under applicable laws, rules or regulations to be approved by stockholders.

V. Use of Proceeds.

Any cash proceeds received by the Corporation from the sale of shares of common stock under the Plan shall be used for general corporate purposes.

VI. Regulatory Approvals.

A. The implementation of the Plan, the grant of any Award and the issuance of shares of common stock in connection with the issuance, exercise or vesting of any Award made under the Plan shall be subject to the Corporation's procurement of all approvals and permits required by regulatory authorities having jurisdiction over the Plan, the Awards made under the Plan and the shares of common stock issuable pursuant to those Awards.

B. No shares of common stock or other assets shall be issued or delivered under the Plan unless and until there shall have been compliance with all applicable requirements of federal and state securities laws, including the filing and effectiveness of the Form S-8 registration statement for the shares of common stock issuable under the Plan, and all applicable listing requirements of The NASDAQ Capital Market, if applicable, and any other stock exchange or other market on which common stock is then quoted or listed for trading.

VII. No Employment/Service Rights

Nothing in the Plan shall confer upon the Optionee or the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Parent or Subsidiary employing or retaining such person) or of the Optionee or the Participant, which rights are hereby expressly reserved by each, to terminate such person's Service at any time for any reason, with or without cause.

VIII. Non-Exclusivity of the Plan

Nothing contained in the Plan is intended to amend, modify, or rescind any previously approved compensation plans, programs or options entered into by the Corporation. This Plan shall be construed to be in addition to and independent of any and all other arrangements. Neither the adoption of the Plan by the Board nor the submission of the Plan to the stockholders of the Corporation for approval shall be construed as creating any limitations on the power or authority of the Board to adopt, with or without stockholder approval, such additional or other compensation arrangements as the Board may from time to time deem desirable.

IX. Governing Law.

All questions and obligations under the Plan and agreements issued pursuant to the Plan shall be construed and enforced in accordance with the laws of the State of Delaware.

X. Information to Optionees and Participants.

Optionees and Participants under the Plan who do not otherwise have access to financial statements of the Corporation will receive the Corporation's financial statements at least annually.

APPENDIX

The following definitions shall be in effect under the Plan:

A. "Award" means any of the following stock or stock-based awards authorized for issuance or grant under the Plan: stock option, stock appreciation right, direct stock issuance, restricted stock or restricted stock unit award or other stock-based award.

B. "Board" means the Corporation's board of directors.

C. "Change in Control" shall be deemed to have occurred if, in a single transaction or series of related transactions:

(i) any person (as such term is used in Section 13(d) and 14(d) of the 1934 Act, or persons acting as a group, other than a trustee or fiduciary holding securities under an employment benefit program, is or becomes a "beneficial owner" (as defined in Rule 13-3 under the 1934 Act), directly or indirectly of securities of the Corporation representing 51% or more of the combined voting power of the Corporation, or

(ii) there is a merger, consolidation, or other business combination transaction of the Corporation with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Corporation outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Corporation (or surviving entity) outstanding immediately after such transaction, or

(iii) all or substantially all of the Corporation's assets are sold.

D. "Code" means the Internal Revenue Code of 1986, as amended.

E. "common stock" means the Corporation's common stock, \$0.001 par value per share.

F. "Compensation Committee" means a committee of the Board comprised solely of two or more Eligible Directors who are appointed by the Board to administer the Discretionary Grant and Stock Issuance Programs, who are "outside directors" within the meaning of Section 162(m) of the Code and who are "non-employee directors" within the meaning of Rule 16b-3(b)(3)(i).

G. "Consultant" means a consultant or other independent advisor who is under written contract with the Corporation (or any Parent or Subsidiary) to provide consulting or advisory services to the Corporation (or any Parent or Subsidiary) and whose securities issued pursuant to the Plan could be registered on Form S-8.

H. "Corporation" means Pacific Ethanol, Inc., a Delaware corporation, and any corporate successor to all or substantially all of the assets or voting stock of Pacific Ethanol, Inc. that shall by appropriate action adopt the Plan.

I. "Discretionary Grant Program" means the discretionary grant program in effect under Article Two of the Plan pursuant to which stock options and stock appreciation rights may be granted to one or more eligible individuals.

J. "Eligible Director" means a Board member who is not, at the time of such determination, an employee of the Corporation (or any Parent or Subsidiary).

K. "Employee" means an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

L. "Exercise Date" means the date on which the Corporation shall have received written notice of the option exercise.

M. "Fair Market Value" per share of common stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the common stock is at the time traded on The NASDAQ Capital Market, then the Fair Market Value shall be the closing selling price per share of common stock at the close of regular hours trading (i.e., before after-hours trading begins) on The NASDAQ Capital Market on the date in question, as such price is reported by the National Association of Securities Dealers. If there is no closing selling price for the common stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the common stock is not traded on The NASDAQ Capital Market but is at the time listed or quoted on any other market or exchange, then the Fair Market Value shall be the closing selling price per share of common stock at the close of regular hours trading (i.e., before after-hours trading begins) on the date in question on the market or exchange determined by the Plan Administrator to be the primary market for the common stock, as such price is officially quoted in the composite tape of transactions on such exchange. If there is no closing selling price for the common stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of an established market for the common stock, the Fair Market Value shall be determined in good faith by the Plan Administrator.

In addition, with respect to any Incentive Option, the Fair Market Value shall be determined in a manner consistent with any regulations issued by the Secretary of the Treasury for the purpose of determining fair market value of securities subject to an Incentive Option plan under the Code.

N. "Family Member" means, with respect to a particular Optionee or Participant, any child, stepchild, grandchild, parent, stepparent, grandparent, spouse, former spouse, sibling, niece, nephew, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law or sister-in-law, including adoptive relationships.

O. "Hostile Take-Over" means either of the following events effecting a change in control or ownership of the Corporation:

(i) the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than 50% of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders that the Board does not recommend such stockholders to accept, or

(ii) a change in the composition of the Board over a period of 36 consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be composed of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination.

P. "Incentive Option" means an option that satisfies the requirements of Code Section 422.

Q. "Involuntary Termination" means the termination of the Service of any individual that occurs by reason of:

(i) if such individual is providing services to the Corporation pursuant to a written contract that defines "cause" or "misconduct" or similar reasons such individual could be dismissed or discharged by the Corporation, then such individual's involuntary dismissal or discharge by the Corporation other than for any of such reasons and other than for Misconduct shall be an Involuntary Termination;

(ii) if such individual is not providing services to the Corporation pursuant to a written contract that defines "cause" or "misconduct" or similar reasons such individual could be dismissed or discharged by the Corporation, then such individual's involuntary dismissal or discharge by the Corporation for reasons other than Misconduct shall be an Involuntary Termination;

(iii) if such individual is providing services to the Corporation pursuant to a written contract that defines "good reason" or similar reasons such individual could voluntarily resign, then such individual's voluntary resignation for any of such reasons shall be an Involuntary Termination; or

(iv) if such individual is providing services to the Corporation pursuant to a written contract that does not define "good reason" or similar reasons such individual could voluntarily resign, then such individual's voluntary resignation following (A) a change in his or her position with the Corporation that materially reduces his or her duties and responsibilities or the level of management to which he or she reports, (B) a reduction in his or her level of compensation (including base salary, fringe benefits and target bonus under any corporate-performance based bonus or incentive programs) by more than 15% or (C) a relocation of such individual's place of employment by more than 50 miles, provided and only if such change, reduction or relocation is effected by the Corporation without the individual's consent, shall be an Involuntary Termination.

R. "Misconduct" means the commission of: any act of fraud, embezzlement or dishonesty by the Optionee or Participant; any unauthorized use or disclosure by such person of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary); any illegal or improper conduct or intentional misconduct, gross negligence or recklessness by such person that has adversely affected or, in the determination of the Plan Administrator, is likely to adversely affect, the business, reputation, goodwill or affairs of the Corporation (or any Parent or Subsidiary) in a material manner; any conduct that provides a basis for the Corporation to terminate for "cause," "misconduct" or similar reasons the written contract pursuant to which the Optionee or Participant is providing Services to the Corporation; resignation by the Optionee or Participant on fewer than 30 days' prior written notice and in violation of an agreement to remain in Service of the Corporation, in anticipation of a termination for "cause," "misconduct" or similar reasons under the agreement, or in lieu of a formal discharge for "cause," "misconduct" or similar reasons. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss any Optionee, Participant or other person in the Service of the Corporation (or any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan, to constitute grounds for termination for Misconduct.

S. “1934 Act” means the Securities Exchange Act of 1934, as amended.

T. “Non-Statutory Option” means an option not intended to satisfy the requirements of Code Section 422.

U. “Optionee” means any person to whom an option is granted under the Discretionary Grant Program.

V. “Parent” means any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

W. “Participant” means any person who is issued shares of common stock or restricted stock units or other stock-based awards under the Stock Issuance Program.

X. “Permanent Disability” or “Permanently Disabled” means the inability of the Optionee or the Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve months or more.

Y. “Plan” means the Corporation’s 2016 Stock Incentive Plan, as set forth in this document.

Z. “Plan Administrator” means the particular entity, whether the Compensation Committee or the Board, which is authorized to administer the Discretionary Grant and Stock Issuance Programs with respect to one or more classes of eligible persons, to the extent such entity is carrying out its administrative functions under those programs with respect to the persons then subject to its jurisdiction.

AA. “Plan Effective Date” means the date that stockholder approval of the Plan is obtained in accordance with Section III.A. of Article Four.

BB. “Section 16 Insider” means an officer or director of the Corporation subject to the short-swing profit liability provisions of Section 16 of the 1934 Act.

CC. “Service” means the performance of services for the Corporation (or any Parent or Subsidiary) by a person in the capacity of an Employee, an Eligible Director or a Consultant, except to the extent otherwise specifically provided in the documents evidencing the Award made to such person. For purposes of the Plan, an Optionee or Participant shall be deemed to cease Service immediately upon the occurrence of either of the following events: (i) the Optionee or Participant no longer performs services in any of the foregoing capacities for the Corporation or any Parent or Subsidiary or (ii) the entity for which the Optionee or Participant is performing such services ceases to remain a Parent or Subsidiary of the Corporation, even though the Optionee or Participant may subsequently continue to perform services for that entity.

DD. "Stock Issuance Agreement" means the agreement entered into by the Corporation and the Participant at the time of issuance of shares of common stock under the Stock Issuance Program.

EE. "Stock Issuance Program" means the stock issuance program in effect under Article Three of the Plan.

FF. "Subsidiary" means any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing 50% or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

GG. "Take-Over Price" means the greater of (i) the Fair Market Value per share of common stock on the date the option is surrendered to the Corporation in connection with a Hostile Take-Over or, if applicable, (ii) the highest reported price per share of common stock paid by the tender offeror in effecting such Hostile Take-Over through the acquisition of such common stock. However, if the surrendered option is an Incentive Option, the Take-Over Price shall not exceed the clause (i) price per share.

HH. "10% Stockholder" means the owner of stock (as determined under Code Section 424(d)) possessing more than 10% of the total combined voting power of all classes of stock of the Corporation (or any Parent or Subsidiary).

II. "Withholding Taxes" means the federal, state and local income and employment taxes to which the Optionee or Participant may become subject in connection with the issuance, exercise or vesting of the Award made to him or her under the Plan.



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November 8, 2019

Pacific Ethanol, Inc.
400 Capitol Mall, Suite 2060
Sacramento, California 95814

Re: *Registration Statement on Form S-8*

Ladies and Gentlemen:

At your request, we have examined the form of registration statement on Form S-8 (the "Registration Statement") to be filed by Pacific Ethanol, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Act"), for the purpose of registering 2,000,000 shares of common stock, \$0.001 par value per share, of the Company (the "Shares"), to be sold by the Company upon the exercise of options or pursuant to awards to be granted by the Company under its 2016 Stock Incentive Plan (as amended). The Shares will be offered and sold pursuant to the Company's Registration Statement to be filed with the Commission. This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or prospectus, other than as to the validity of the Shares.

We have examined such matters of fact and questions of law as we have considered appropriate for purposes of this letter. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity to authentic original documents of all documents submitted to us as copies. We have also assumed that the Shares will be evidenced by appropriate certificates that have been properly executed and delivered. With your consent, we have relied upon the foregoing and upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters.

You have informed us that the Company may issue the Shares from time to time on a delayed or continuous basis. This opinion is limited to the General Corporation Law of the State of Delaware ("DGCL"), including the statutory provisions of the DGCL, all applicable provisions of the Constitution of the State of Delaware and all reported judicial decisions interpreting these laws, and federal law, exclusive of state securities and blue sky laws, rules and regulations.

Subject to the foregoing, it is our opinion that the Shares have been duly authorized by all necessary corporate action of the Company, and, upon issuance of the Shares in accordance with the terms of the Plan, the Registration Statement, the terms of the Company's certificate of incorporation and applicable law, and delivery and payment therefor, such Shares will be validly issued, fully paid and nonassessable securities of the Company.

This opinion is for your benefit in connection with the Registration Statement and may be relied upon by you and by persons entitled to rely upon it pursuant to the applicable provisions of federal securities laws. We consent to your filing this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission thereunder.

Respectfully submitted,

/s/ TROUTMAN SANDERS LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this registration statement on Form S-8 of Pacific Ethanol, Inc. of our reports dated March 18, 2019 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting of Pacific Ethanol, Inc., appearing in the Annual Report on Form 10-K of Pacific Ethanol, Inc. for the year ended December 31, 2018.

/s/ RSM US LLP

Sioux Falls, South Dakota
November 8, 2019